Kenmore

INSTRUCTIONS

MODEL 1931 • ZIG • ZAG SEWING MACHINE

Sears, Roebuck and Co.

Dear Homemaker:

You have just invested in a very fine zigzag sewing machine. Before using your new Kenmore machine, please pause for a moment and carefully read this booklet which contains instructions on how to operate and care for your machine.

Specific instructions are given on threading, tension adjustments, cleaning, oiling, etc. This will help you obtain the best sewing results and avoid unnecessary service expense for conditions beyond our control.

Advice on the operation and care of your machine is always available at your nearest Sears Retail Store. Should you have any further questions on your sewing machine, please write to me at the address given below.

Please remember, any correspondence or reference to your machine must mention the model number and serial number of your machine.

Kenmore Sewing Machine

Record in space provided below the model number and serial number of this appliance. The model number and serial number are located on the nomenclature plate, as identified on Page 3 of this booklet.

Model No.____________ Serial No.____________

Retain these numbers for future reference.

Consumer Services Manager
Department 620
Simpsons-Sears Limited
Toronto, Ontario, Canada

Consumer Services Manager
Department 620
Sears, Roebuck and Co.
Sears Tower
Chicago, Illinois 60684

Kenmore 158 Model 1931 User Manual facsimile ~ 2026
Scan courtesy R. France
Layout & Production courtesy T. Meyer

PDF may be freely shared and always free.

TABLE OF CONTENTS

Click on topic to jump to correct page in PDF

Click on SECTION box to jump to start of Section

SECTION I

Knowing Your Sewing Machine

Identifying Parts 2, 3
Installing Machine 4
Converting to Free-arm Sewing 5
Winding the Bobbin 6
Threading the Bobbin Case 7
Threading of Top Thread 8

Using the Controls

Adjusting Top Tension 9
Adjusting Bobbin Tension 10
Checking Tensions 11
Stitch Width Control 12, 13
Stitch Length Control 12, 13
Reverse Stitch Control 12, 13
Special Stitch Modifier 14, 15
Metal Cam 14, 15
Special Stitch Dial 16
Pressure Regulator 17
Feed Dog Control 18
Sewing Light 18
Needle Plate Inserts 19
Seam Guides 19

Accessories

Needles 20, 21
Presser Feet 22
Buttonhole Attachment 23
Design Cams 24

SECTION II

Starting to Sew 1

Garment Construction Stitches

Straight Stitching 2
Zigzag Stitching 3
Stretch Stitching 4

Special Finishing Stitches

Satin Stitching, Appliqueing 5
Buttonhole Making 6
Blind Hemming 7
Zipper Application 8
Mending, Darning 9
Button Sewing, Bar Tacking 10
Special Edge Stitch, Fagoting Stitch 11
Free-arm Sewing 12
Special Design Stitches 13
Single Needle Designs 14
Basic Decorative Designs 15
Using the Double Needle 17, 18

SECTION III

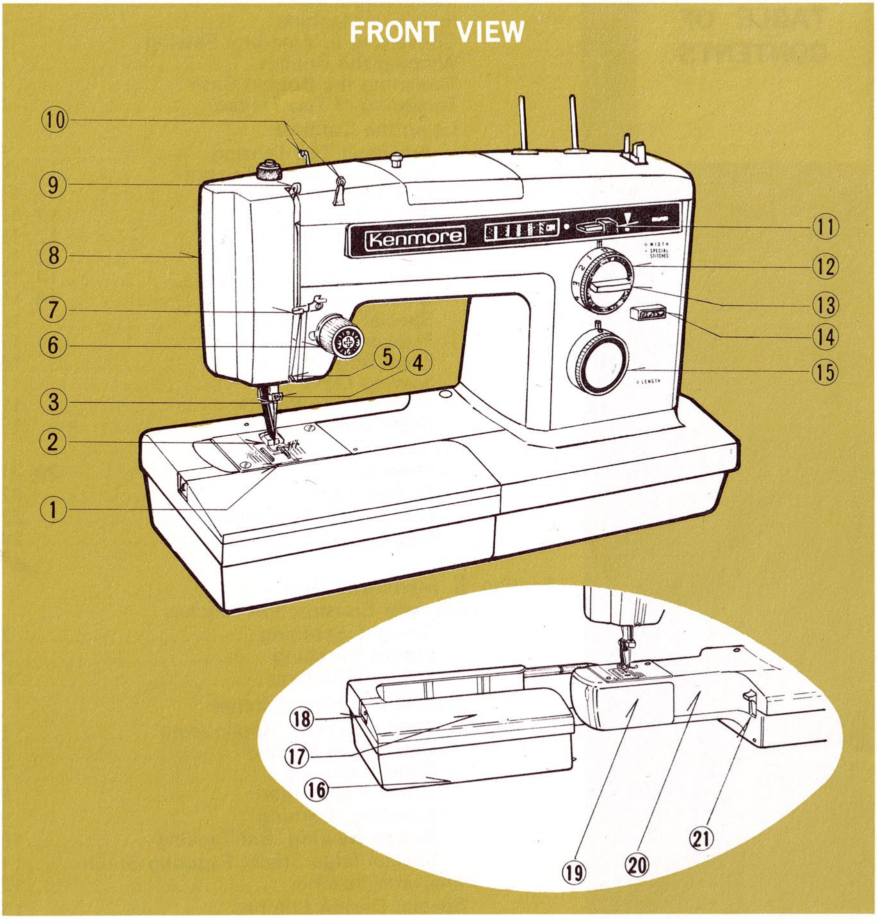
Checking Performance Problems 1

SECTION IV

Caring for the Machine

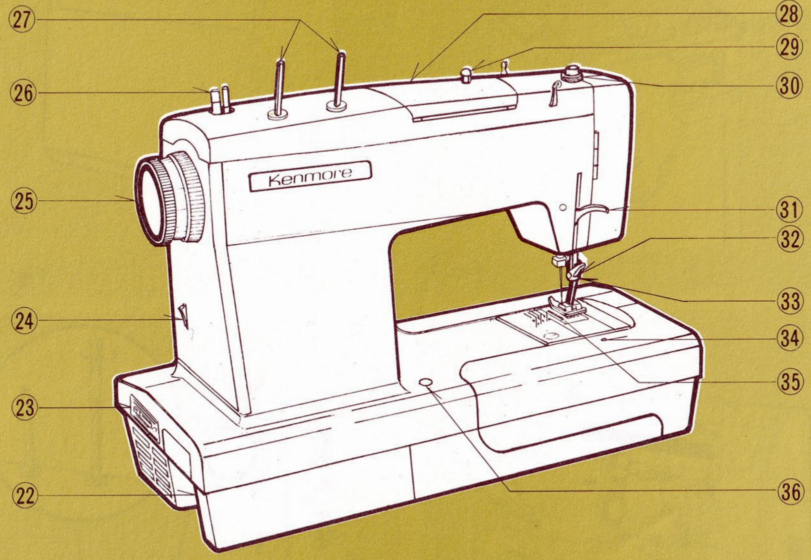
Cleaning Feed Dogs and Shuttle 1
Oiling Under Arm Cover Plate 2
Oiling Underside 3
Oiling in Face Cover Plate 4
Parts List 5, 6

Knowing Your Sewing Machine


FRONT VIEW
⑩
⑨
⑧
⑦
⑥
⑤
④
③
②
①
Kenmore
WIDTH
SPECIAL STITCHES
LENGTH
⑪
⑫
⑬
⑭
⑮
⑱
⑰
⑯
⑲
⑳
㉑

1. Zigzag Stitch Needle Plate
2. Presser Foot
3. Thread Guide
4. Needle Clamp Screw
5. Thread Guide
6. Top Thread Tension Control
7. Face Cover Thread Guide
8. Face Cover Plate
9. Take-up Lever
10. Upper Thread Guide
11. Special Stitch Modifier
12. Stitch Width Control
13. Special Stitch Dial
14. Reverse Stitch Control
15. Stitch Length Control
16. Base
17. Base Front Cover
18. Front Cover Release Button
19. Shuttle Cover
20. Free Arm
21. Feed Dog Control

BACK VIEW


27
26
25
24
23
22
Kenmore
28
29
30
31
32
33
34
35
36

22. Electric Cord Receptacle
23. Nomenclature Plate
24. Light and Power Switch
25. Hand Wheel
26. Bobbin Winder
27. Thread Spool Pins
28. Design Cam Cover
29. Bobbin Winder Tension Disc
30. Pressure Regulator
31. Presser Foot Lever
32. Thread Cutter
33. Presser Foot Lock
34. Buttonhole Attachment Guide Pin Hole
35. Feed Dogs
36. Base Release Button

INSTALLING MACHINE

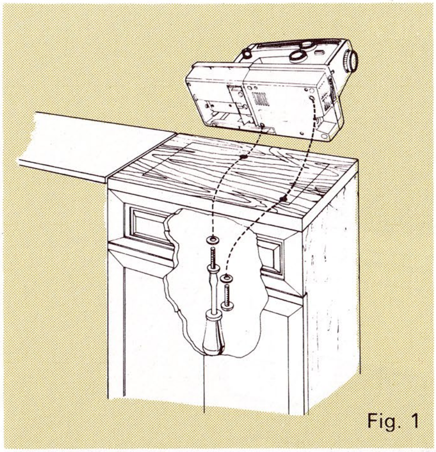


Fig. 1

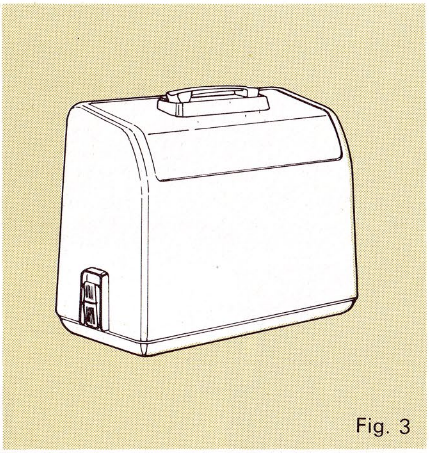


Fig. 3

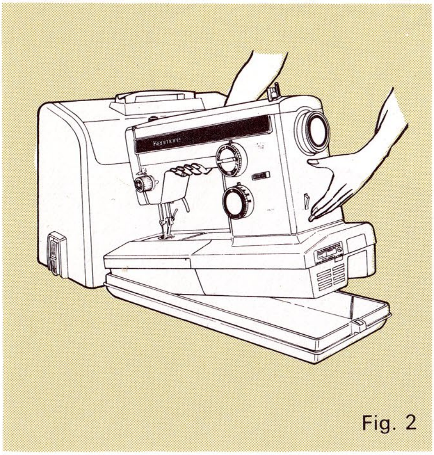


Fig. 2

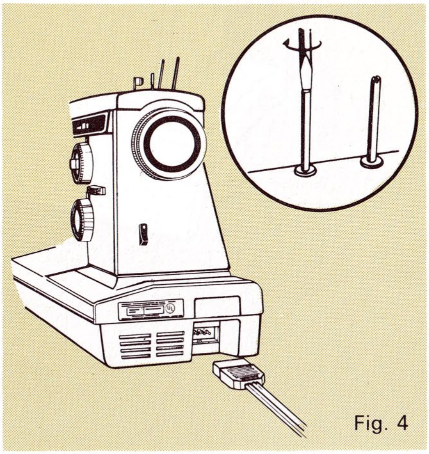


Fig. 4

1. To install the machine in cabinet, position machine head on cabinet platform so that holes on bottom of machine match those on boards. Insert washers and screws and tighten into place. (Fig. 1)
2. A separate base and cover is available to carry the machine when needed. The base must be removed when machine is used.

   To install machine in carrying case, set machine into base, with word FRONT in base facing you. (Fig. 2)

   Place cover on machine with word "SEARS" on handle facing you. The case slopes in the same direction of the machine. (Fig. 3)
3. Push the speed control plug onto three-prong connector. Plug machine cord into any 110-120 volt wall outlet. Turn on power by pushing light and power switch. (Fig. 4)
4. Spool pins are packed in accessory box. Screw thread spool pins in place securely with a screw driver. Position nylon discs as shown in illustration.

CONVERTING TO FREE-ARM SEWING

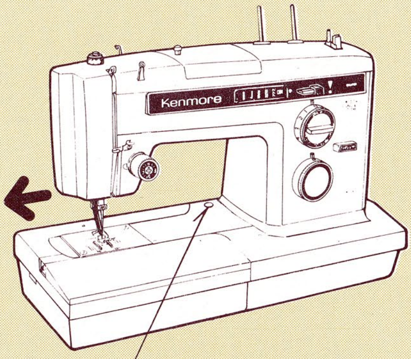

Kenmore
Base Release Button

Fig. 1

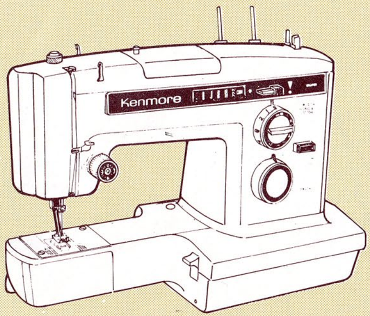
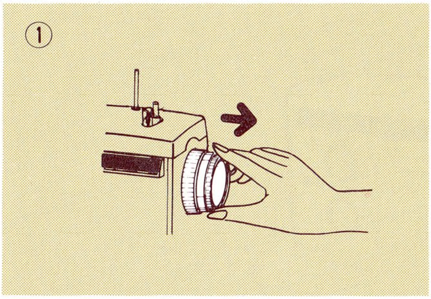


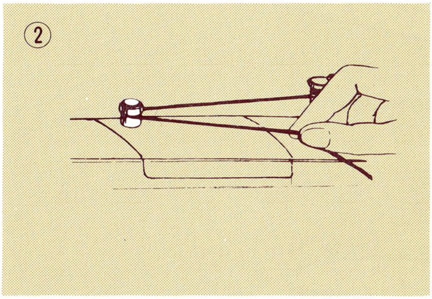
Fig. 2

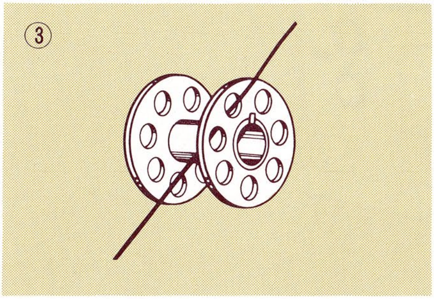
1. Remove the base from the machine by pushing the release button and pulling the base to the left at the same time. (Fig. 1, 2)
2. To replace the base, simply slide it along the free arm to its original position. (Fig. 1)

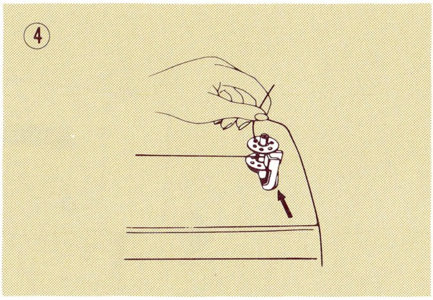
Note: Base cannot be removed or replaced unless shuttle cover is closed.

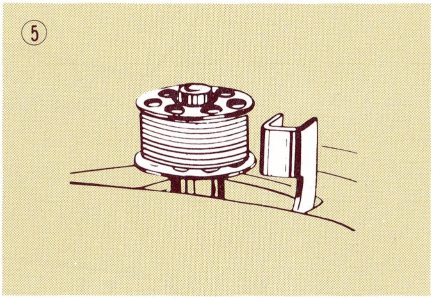
WINDING THE BOBBIN

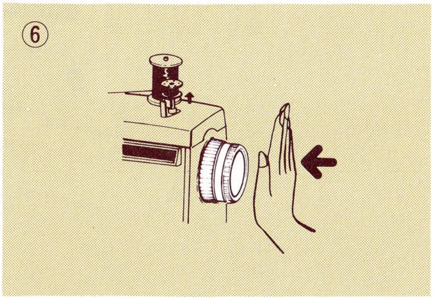








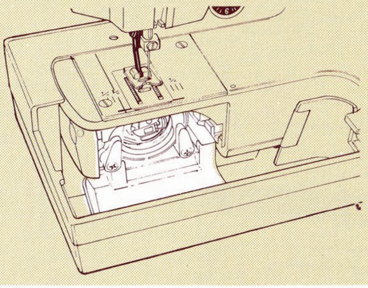




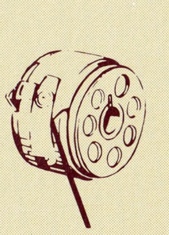
1. Release clutch by pulling hand wheel as shown in Fig. 1.
2. Draw thread from spool through bobbin winder tension disc as shown.
3. Pull end of thread through hole in bobbin as shown.
4. Place bobbin onto bobbin winder shaft with end of thread coming from the top of the bobbin. Push bobbin winder latch against bobbin until it clicks. Holding onto end of thread, start machine. When bobbin is slightly filled, snip off end of thread.
5. Start machine. Wind thread until bobbin winder latch releases.
6. Push in hand wheel to return to stitching position. Remove bobbin.

THREADING THE BOBBIN CASE

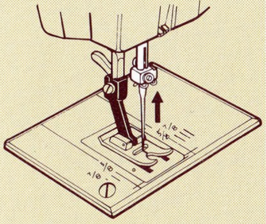
①



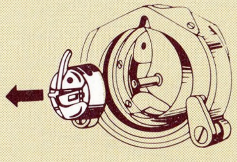
⑥



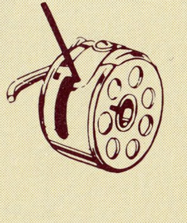
②



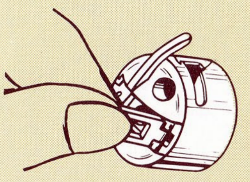
④



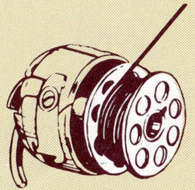
⑦



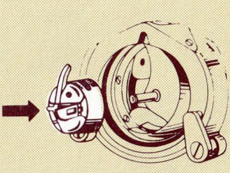
③



⑤



⑧



1. Remove base front cover by pushing the release button on the left side. Open the shuttle cover.
2. Raise needle to its highest position by rotating hand wheel toward you.
3. To remove bobbin case from shuttle, pull open latch of bobbin case.
4. Pull bobbin case straight out of shuttle.
5. Insert bobbin into bobbin case making sure thread is coming from bobbin as shown.
6. Pull thread through slot of case as shown.
7. Pull thread under tension spring.
8. Holding latch open, position case into shuttle, and release latch. Case should lock into place when latch is released.

THREADING OF TOP THREAD

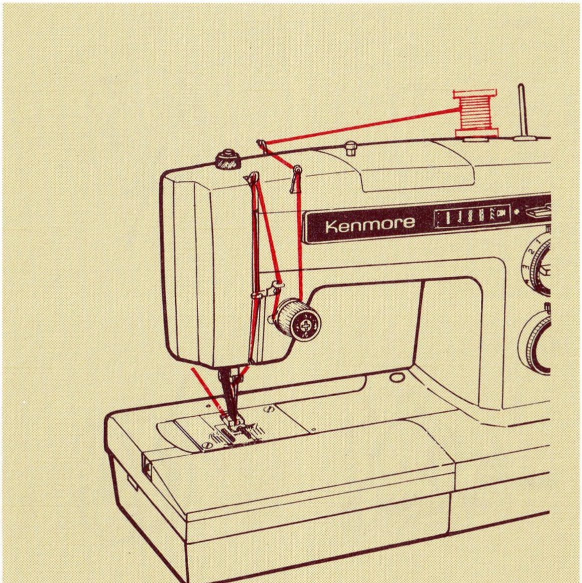


Fig. 1

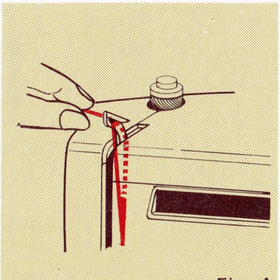


Fig. 4

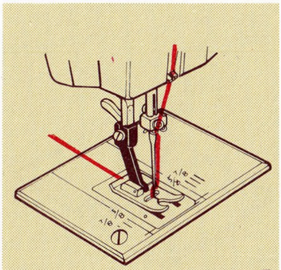


Fig. 5

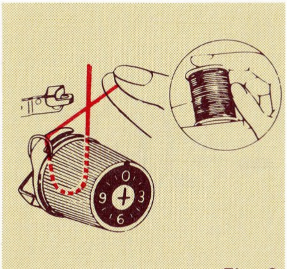


Fig. 2

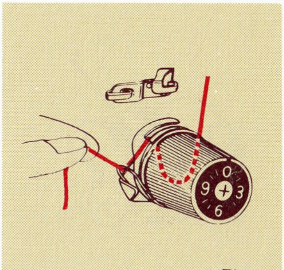


Fig. 3

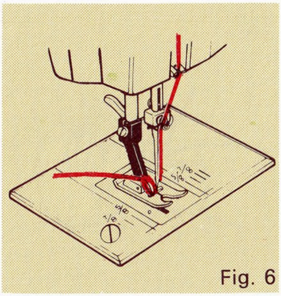


Fig. 6

Place thread on spool pin as shown with thread coming from the back of the spool. Draw thread through the top thread guides. Holding the spool stationary with right hand, pull the end of the thread between the tension discs as shown. Pull the spring wire loop up and past the top hook until the thread can be slipped into hook (See Fig. 2).

When the thread is released, the spring wire loop will return to position (Fig. 3) with thread in proper place. Release spool of thread and hook thread into take up lever as shown (Fig. 4).

Continue to thread machine exactly as shown. Needle must always be threaded in direction as shown in Fig. 5.

Hold needle thread loosely in left hand and rotate hand wheel toward you one complete turn. Bring bobbin thread up by pulling upper thread. (Fig. 6).

CONTROLS

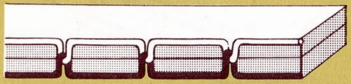
ADJUSTING TOP TENSIONS

Probably the most important control on your machine is this one that regulates your top thread tension. It consists of discs between which the thread passes. The pressure on these discs is regulated by turning the dial on the front of the control. The higher the number, the tighter the tension.

There are many reasons for having to reset your tension. The best tension for one fabric may not be correct for another. The required tension depends upon the stiffness of the fabric, thickness of the fabric, numbers of layers of fabric being sewn, as well as the type of stitch you are making.

It is best to test the stitching on a scrap of the fabric you are using before starting to make a garment.

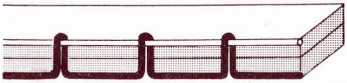
❶



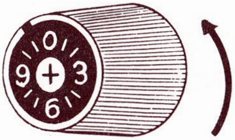
A perfect straight stitch will have threads locked between the two layers of fabric with no loops on top or bottom.

---

❷ Upper thread too tight

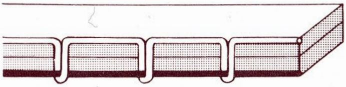


Decrease Tension

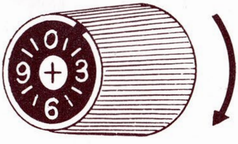


---

❸ Upper thread too loose



Increase Tension



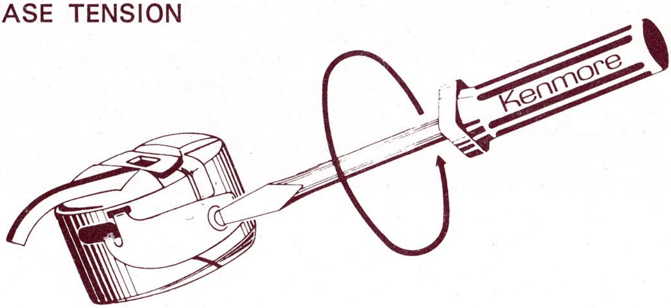
ADJUSTING BOBBIN TENSIONS

Bobbin tension requires adjusting less frequently than the upper thread tension.

If the stitch is satisfactory but the seam is puckered, it may be necessary to loosen the tension on both the top and bottom threads. Be sure to balance them as indicated on Page 9.

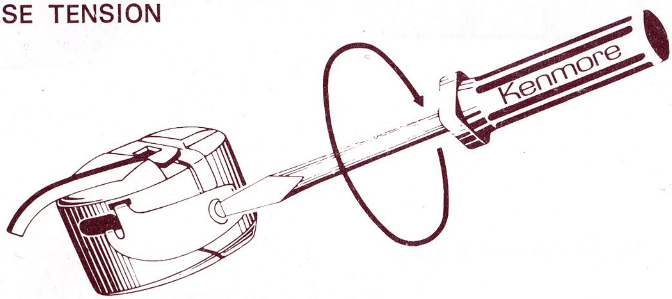
When adjusting the tension on the bobbin case, make slight adjustments with a screwdriver.

DECREASE TENSION



Turn Counter Clockwise.

INCREASE TENSION



Turn Clockwise.

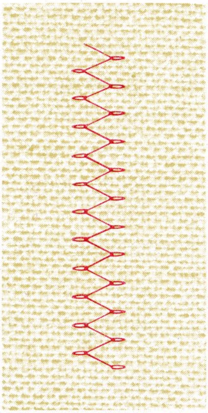
CHECKING TENSIONS

The easiest way to check tensions is to sew a medium zig zag stitch on the fabric you will be using. Use the appropriate type of thread and needle. Use different colors of thread on the bobbin and upper spool.

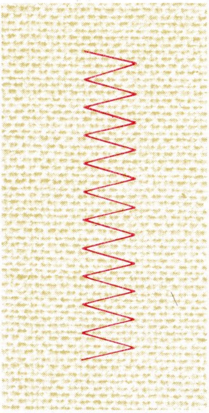
Sew a line of zig zag stitches. The bobbin thread should not show on the top of the fabric.

Adjust the top tension if necessary to achieve the stitch balance mentioned above.

UNBALANCED



BALANCED



STITCH WIDTH CONTROL

This control regulates the width of the stitch you select. THE HIGHER THE NUMBER - THE WIDER THE STITCH. You may vary your zigzag stitch width by adjusting this control to the setting you desire.
This control must be on Red Dot in order to do straight stitching.

Turn only the outer rim of this control to set the stitch width.
Turn the center of the control to dial the special stitches the machine is capable of sewing.

STITCH LENGTH CONTROL

The stitch length control regulates the length of the stitch you select. THE HIGHER THE NUMBER - THE SHORTER THE STITCH.

The number on the stitch length control indicates the approximate number of stitches per inch. The stitch setting you use will be determined by the thickness of the fabric you are sewing.

A longer stitch setting should be used for thicker fabric or more layers of fabric.
The middle range of the control is the 10-12 stitch per inch range which is the most commonly used.

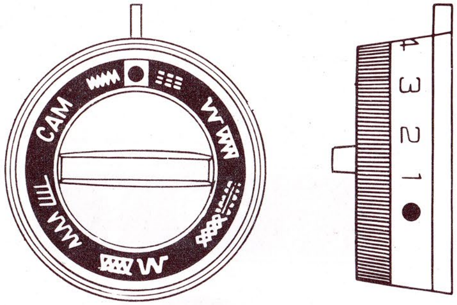
A basting stitch is made by using the longest possible stitch setting - 6 stitches per inch.
The red marking ▬ on the control is the setting used for the shortest stitches such as in Satin Stitching.

REVERSE STITCH CONTROL

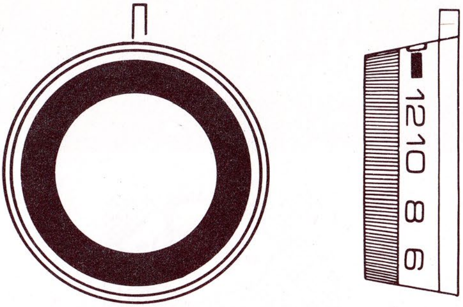
It is best to begin and end seams with a few stitches taken in reverse. This is called back tacking. Back tacking fastens the ends of the seams firmly and prevents raveling.

When reverse stitching is needed, turn the control clockwise and hold there during sewing. The fabric will immediately start feeding backwards and seam will be fastened.

STITCH WIDTH CONTROL

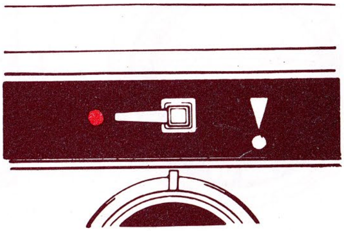


STITCH LENGTH CONTROL

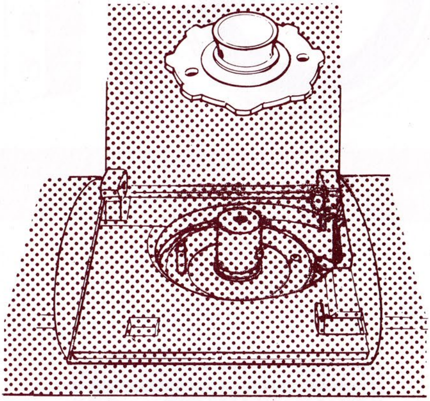


REVERSE STITCH CONTROL

SPECIAL STITCH MODIFIER



METAL CAM



SPECIAL STITCH MODIFIER

This control determines the feed of the feed dogs. All simple forward stitches require that this control be set at red dot. These stitches are the straight stitch, zigzag, mending, blind hem, and basic decorative designs.

Stretch stitches and reverse stitch designs are made by setting the Special Stitch Modifier on the white dot or arrow head mark above the white dot.

METAL CAM

When you open the Design Cam Cover you will find a metal cam in the machine, as illustrated. This cam must remain in the machine at all times, unless you are using one of the plastic design cams.

Page 13 in Section II will explain in further detail the use of the plastic cams.

NOTE

Always insert cam with die stamped "20" to appear on top.

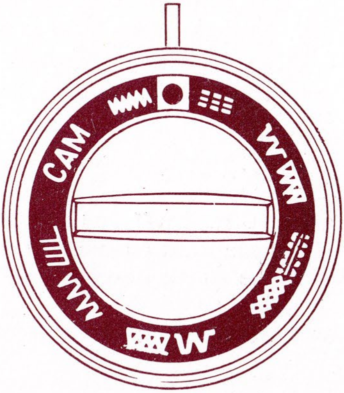
SPECIAL STITCH DIAL

There are certain types of utility stitches you will use often in your home sewing. This control enables you to just dial the stitch you need for the task at hand.

All stitches printed in red on the dial must be sewn with the Special Stitch Modifier set at the Red Dot.

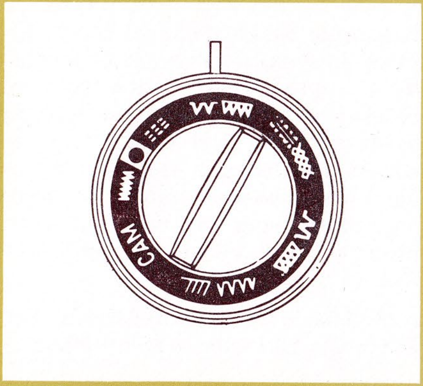
To make the stitches printed in white on this dial, the Special Stitch Modifier must be set at the White Dot.

THE RED DOT SETTING



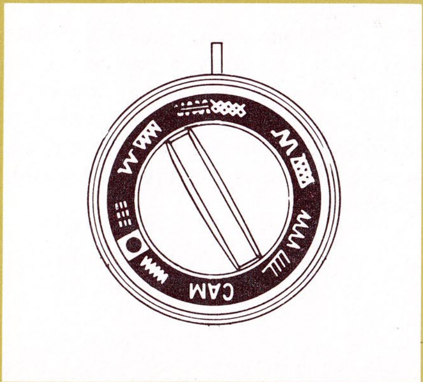
The setting illustrated above is the one used for most of your stitching. At this setting you may straight stitch, stretch stitch and make a simple zig zag stitch. As each stitch is dependent upon the settings of your other controls, carefully read the directions in the next section of the book for the various stitches.

BLIND STITCH AND OVERCAST STRETCH STITCH



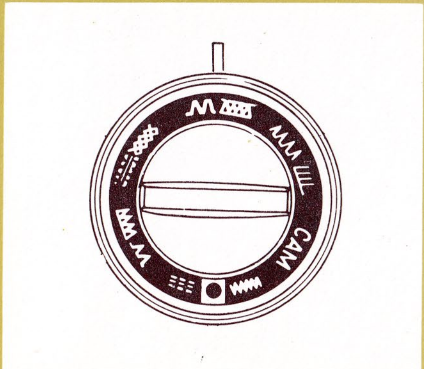
Blind hems are made by using the setting illustrated with the Stitch Modifier set on the Red Dot. When the Modifier is set on the White Dot, overcast stretch stitching is made.

SPECIAL MENDING STITCH AND SMOCKING STRETCH



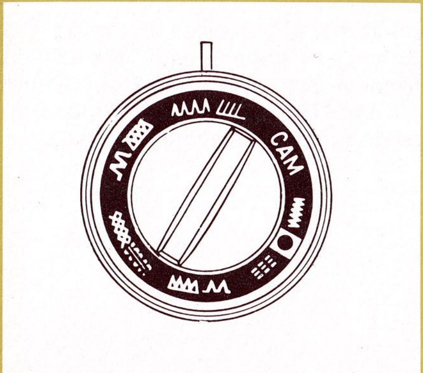
You will find that much of your sewing is in the mending category. For this reason you have been provided with a stitch for the repair of tears. It is accomplished with the illustrated setting and the Modifier set at the Red Dot. When the Modifier is turned to the White Dot a Smocking Stitch results. For directions see the next section of this book.

SPECIAL BOX STITCH AND ELASTIC STRETCH



The setting illustrated is used for special edge finishing and special stretch stitch for sewing elastic such as sportswear, girdles and other garments that require stretch. See next section of this book for detailed use of the stitches.

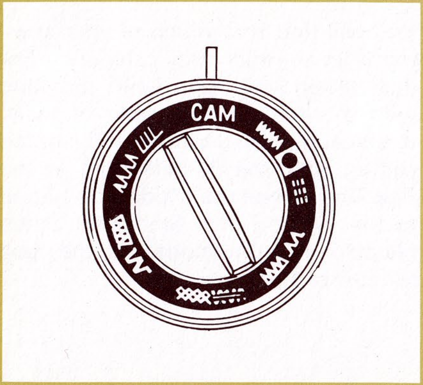
SERGING OR PINE LEAF STRETCH



Serging or pine leaf stretch is used for seam finishing on all types of fabrics. It is a stitch used in the garment industry. It forms a good looking seam, stitching and overcasting the edges. This stitch is useful for seaming of swimwear, stretch ski pants and other types of knit sportswear. Modifier must be set on the White Dot.

If Modifier is set on the red dot, a Shell Stitch can be made on nylon tricot.

CAM SETTING

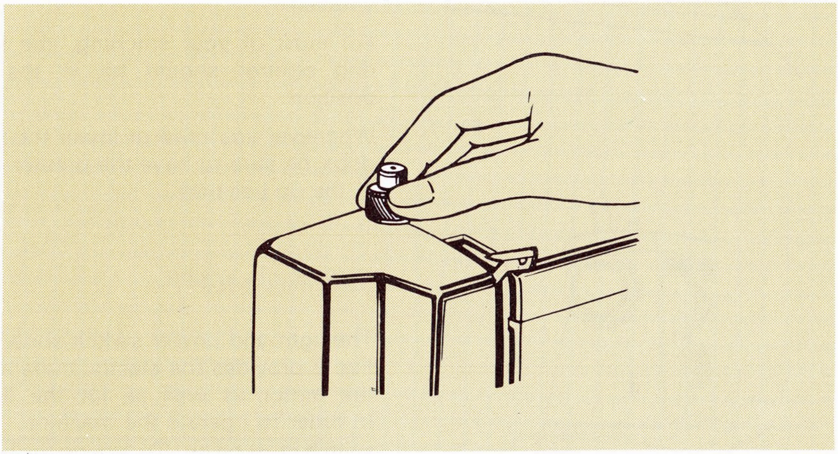


The CAM setting on the dial is used whenever you wish to use any of the 14 insert cams to make decorative embroidery patterns. Very detailed instructions in the use of the cams and designs are given in the next section of the book.

OTHER ADJUSTMENTS OF MACHINE IN SEWING

In addition to the obvious controls of your machine, there are other small regulators and controls to aid you in using your sewing machine.

PRESSURE REGULATOR



Push down the outer ring of the pressure regulator. This will release the pressure on the presser foot. (See above).
To increase the pressure, push down inner pin until a suitable pressure is obtained.

Insufficient pressure may cause poor feeding of the fabric, skipped stitches, or difficulty in guiding the fabric. If feed dogs or presser foot marks appear on the fabric, reduce the pressure.

When sewing multiple thickness or heavy fabric, reduce the pressure. Increase pressure when sewing lighter weight fabrics.

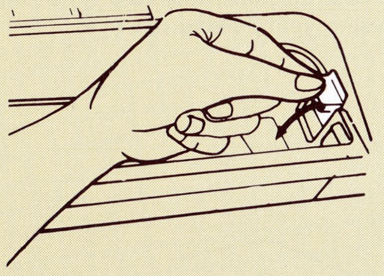


Fig. 1

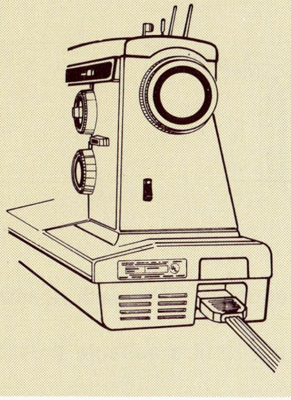


Fig. 2

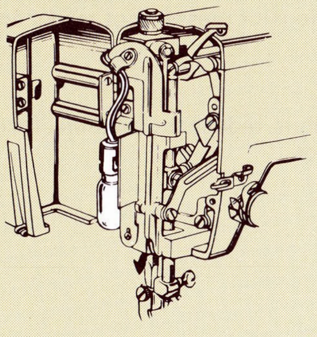


Fig. 3

FEED DOG CONTROL

There are a few times when you want to control the feeding of the fabric yourself. Remove the base cover from the base. Pull down the feed dog control shown in Fig. 1. The feed dogs will drop. You may then determine the movement of the fabric yourself.

For most of your stitching, the feed dog control should be in the up position.

Whenever you raise or lower the feed dogs, be sure to have the presser foot in the up position.

SEWING LIGHT

The light and power switch shown in Fig. 2 provides the electric current for the motor as well as for the light. In order to operate the machine, this switch must be on. To turn on the light, depress the upper side of the switch. If you are interrupted while sewing and must leave the machine unattended, just turn off the switch and the machine cannot be started accidentally.

The sewing light is located inside the face cover plate as shown. To replace the bulb, turn light off, and swing the face cover plate open. Push up on the bulb slightly and turn bulb clockwise. Remove bulb from socket. Push in new bulb and turn counter-clockwise.

NEEDLE PLATE INSERTS

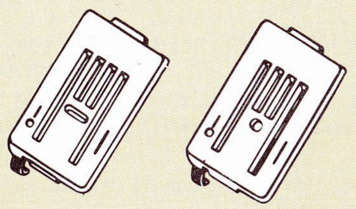


Fig. 1

You are provided with two needle plate inserts:

A. Needle plate with wide oval hole for all zigzag stitching.

B. Needle plate with round hole for regular straight stitching and straight stretch stitch sewing.

CHANGING NEEDLE PLATE INSERTS

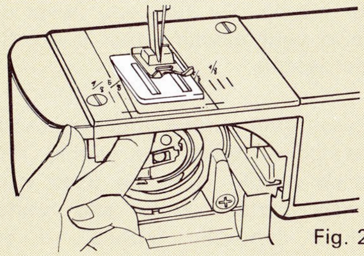


Fig. 2

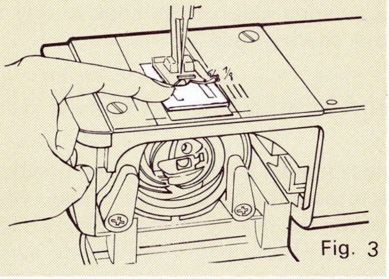


Fig. 3

1. Raise needle to its highest position and raise presser foot.
2. Swing shuttle cover open.
3. Push a spring under the plate as shown to release the needle plate insert.
4. Remove needle plate insert by placing thumb under edge of plate.
5. Replace the needle plate insert positioning as shown in Fig. 3.
6. Push needle plate insert down to lock into place. Reposition the shuttle cover.

SEAM GUIDES

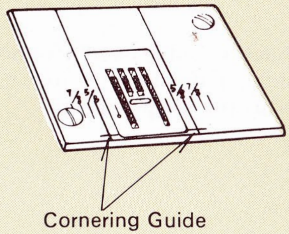


Fig. 4

Seam guides are printed on either side of the needle plate to aid you in guiding your fabric. THE GUIDE LINE EXTENDING ABOVE THE RIGHT SIDE OF THE NEEDLE PLATE IS THE "ALL IMPORTANT" 5/8" SEAM LINE.

The cornering guides are convenient when turning a square corner 5/8" from the fabric edge. See next section of this book for directions.

ACCESSORIES

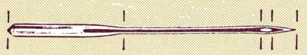


Fig. 1

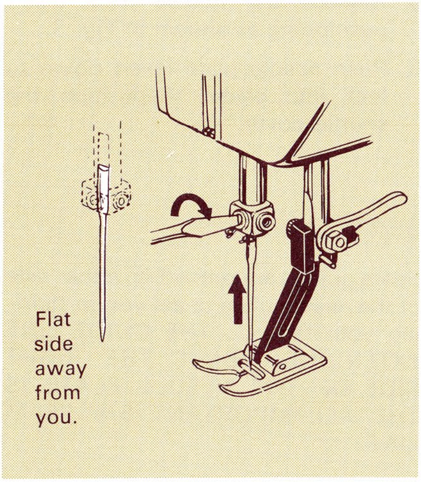
NEEDLES

Use KENMORE needles. The size of the needle should conform with the size of the thread and both should be suitable to the fabric (See next page).

Never use a bent needle or one with a blunt point.

Fig. 1. shows you the exact length of your needle. Be sure you never use one in your machine that is not this exact length.

You will find among your accessories a "Q NEEDLE"™ with blue shank. This special needle is to be used when sewing certain knits and certain difficult synthetic fabrics. If you experience skipped stitches in any of your sewing, use "Q NEEDLE"™ .



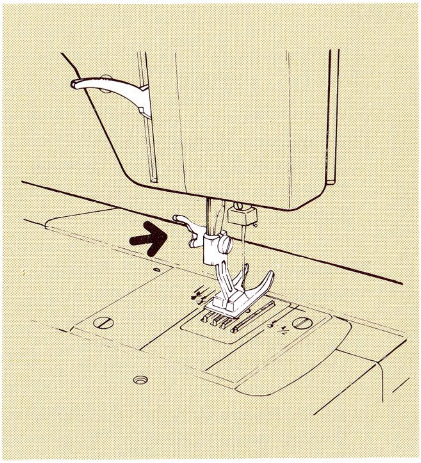
PLACEMENT OF NEEDLE

Raise needle bar to its highest position by turning the hand wheel toward you. Loosen the needle clamp screw. Holding the needle with the flat side away from you, slip the needle into the needle bar. When it is in as far as it will go, tighten the needle clamp screw with a screwdriver.

If you have a double needle for decorative stitching, it is inserted in the same manner as the single needle.

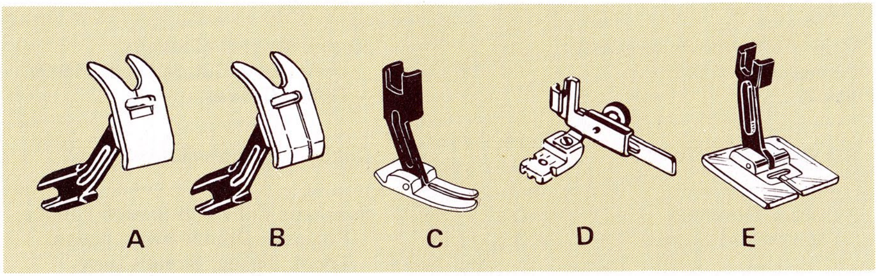
NEEDLE, THREAD AND FABRIC CHART

THREAD SIZE	NEEDLE SIZE	FABRIC
Polyester Core/Cotton Wrap Fine Mercerized Cotton Polyester Synthetic Silk A	9 or 11	Lightweight: Batiste, Dimity, Chiffon, Silks, Synthetic Jerseys, Fine Lace, Organza, Crepe, Taffetta, Voile, Organdy
50 Mercerized Cotton Polyester Synthetic Silk A	14	Medium Weight: Cotton, Cotton Blends, Percale, Gingham, Shantung, Pique, Seersucker, Satin, Knits, Vinyl, Suitings, Linen, Wool Crepe, Leather
50 Mercerized Cotton Mercerized Heavy Duty Polyester Synthetic Silk A	14 or 16	Medium Heavy Weight: Corduroy, Denim, Wool, Sailcloth, Wool Flannel, Gabardine, Velvets, Leather
Heavy Duty Mercerized Cotton Polyester Synthetic Silk A	18	Heavy Weight: Coatings, Upholstery, Cotton Duck, Heavy Twills, Canvas
Silk Buttonhole Twist	16, 18 or "Q NEEDLE"™	Decorative Top-stitching on all
Polyester Synthetic 50 Mercerized Cotton	"Q SET"™ ("Q NEEDLE"™ and "Q FOOT"™)	Synthetic Knits and Stretch Fabrics: Polyester Double Knits, Nylon Tricot, Jersey, Stretch Terry, Spandex, Cire Tricot



PRESSER FEET

To replace any of the feet with ease, simply drop the presser foot lock and slip the foot away from the presser bar. To aid you in the placement of the presser foot, the presser foot lever can raise the foot beyond the normal "up" position. After the foot is placed on the presser bar, lift the lock as high as it will go to hold the foot securely.



You have been given a variety of presser feet:

A. Zigzag Foot
B. Satin Stitch Foot
C. Straight Stitch Foot
D. Zipper Foot
E. Buttonhole Foot

BUTTONHOLE ATTACHMENT

You will find the following parts in your Attachment Box:

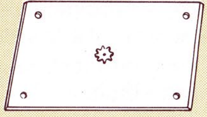


Fig. 1

1. Cover Plate with pinion gear in the center.

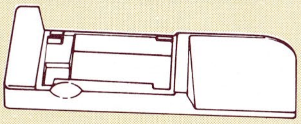


Fig. 2

2. Buttonhole adapter to be used instead of base cover when buttonhole attachment is used.

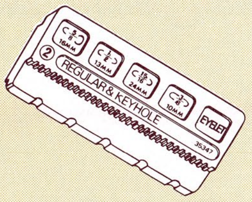


Fig. 3

3. A set of 2 templates is furnished with each attachment. Each template is marked showing the type and length of each buttonhole.

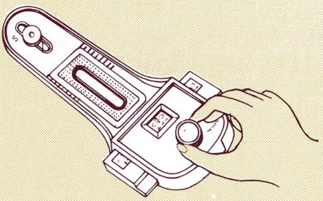


Fig. 4

4. Desired size of buttonhole is selected by turning template advance knob. Length of buttonhole appears in window on top side of guide plate.

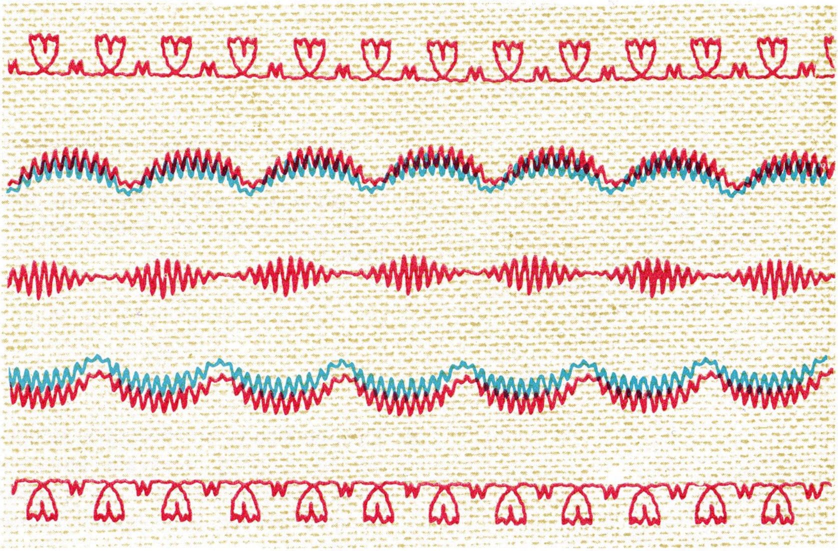
Details in using this attachment are given in the next section. Follow those directions carefully for perfectly formed buttonholes.

DESIGN CAMS

This machine enables you to sew beautiful decorative embroidery patterns by the use of the many cams supplied with your machine. All the designs may be varied by using the double needle and two different colors of thread as well as by changing the width of the zigzag stitch.

Please read the Special Design Stitching pages in the next section of the book. You will be told how to insert the cams and the machine settings to use to make the illustrated designs.

You will find many uses for the designs in combination with appliques, bias tapes, laces and other decorative trimmings. It is possible to combine several designs to give an interesting effect.

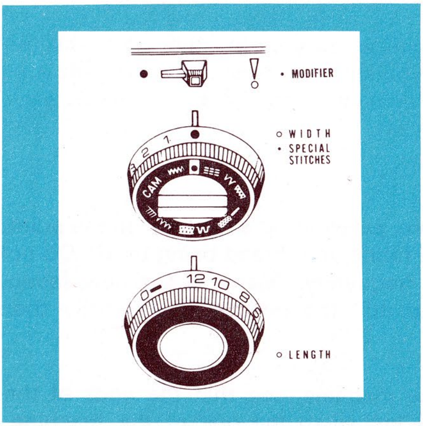


Starting to Sew

Now that you are familiar with the controls on your machine and with the accessories provided for the machine, you are ready to start to sew with your new Kenmore sewing machine. Below are some good habits to follow each time you sit down to sew:

1. Test the needle - it should be straight, properly set and sharp on the point. It should be the correct size for the fabric and thread being used. Do not be afraid to change your needle frequently. Many of the new fabrics made of synthetic blends tend to dull the needles more easily than fabrics made of natural fibers.
2. Before placing the material on the machine, see that the ends of the threads have been drawn about 4 inches to the rear of the machine. Hold on to threads during the sewing of the first 3 or 4 stitches of the seam.
3. Test the machine stitch on a scrap of fabric you plan to use. The fabric should be double thickness. Adjust the machine for the length of stitch and tension suitable to your fabric.
4. Fabric should be placed under the presser foot with the bulk of the material to the left of the needle and the right edge of the material placed on the 5/8" seam marking on the needle plate when making a simple seam.
5. Run the machine at a slow even speed. The more pressure you put on the speed control, the faster the machine will sew.
6. Fasten each seam by back tacking at the beginning and end of the seam.
7. Always finish sewing each seam with the needle at its highest point.
8. Guide the fabric gently with your hand in front of the needle. Never pull or hold the fabric in such a way that the normal feeding is altered.
9. When turning the hand wheel manually, always turn it toward you.

GARMENT CONSTRUCTION STITCHES



STRAIGHT STITCHING

Set your machine just as shown in the illustration in order to straight stitch. It is important each dial have the following settings.

SETTINGS

Special Stitch Dial - WWW ▣ ≡≡≡
Stitch Width Control - Red Dot
Stitch Length Control - 12 to 6
Special Stitch Modifier - Red Dot
Straight Stitch Foot
Straight Stitch Needle Plate

You will find in garment construction that you are doing two types of sewing - temporary and permanent.

1. Temporary stitching - Usually the longest stitch possible and often done on a single layer of fabric. The various types of temporary stitching are:
   Basting
   Stay stitching
   Guide line marking
2. Permanent stitching - This is the actual stitching that holds the garment together. Much of this stitching is visible on the outside of the garment and therefore must be good looking.

The best length stitch to use for medium weight fabrics is 10 - 12 stitches per inch. This is in the middle range of the Stitch Length Control.

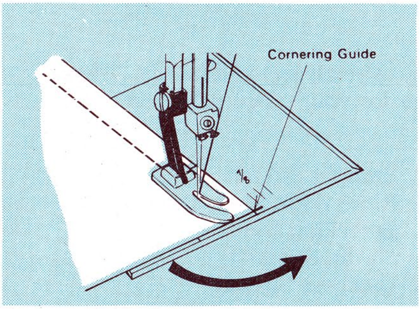
You must remember to lengthen the stitch for heavier fabrics, multiple layers of fabric and thicker seams. Some of these seams are:

Common two layer seams
Curved two layer seams
Top stitched three layer seams
Top stitched four layer seams

When you have two seams crossing each other with considerable thickness, sew slowly and carefully so the seam will be as strong as possible in this area.

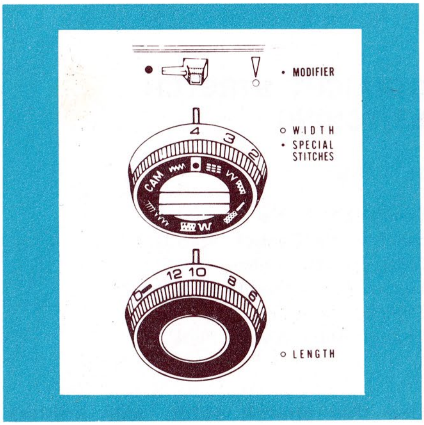
FASTENING A SEAM

Be sure both threads are drawn back under the presser foot. Lower needle into fabric about 1/2 inch from beginning of seam. Turn the reverse stitch control clockwise and stitch in reverse until needle reaches beginning of seam. Release control and complete seam. When you reach the end, turn the control clockwise and sew back over 1/2 inch of completed seam.



TURNING A SQUARE CORNER

To turn a square corner 5/8" from the fabric edge, stop stitching with the needle tip piercing the fabric, when reaching the cornering guide as shown. Raise the presser foot, turn fabric. New stitching line will align with 5/8" seam guide on side of needle plate. Lower the presser foot and begin stitching in new direction.



ZIGZAG STITCHING

SETTINGS

Special Stitch Dial - www▣≡≡≡
Stitch Width Control - 1 to 4
Stitch Length Control - Any Number
Special Stitch Modifier - Red Dot
Zigzag Presser Foot
Zigzag Needle Plate

This type of stitching greatly expands the use of your machine. This is the feature that enables you to overcast seams, blind hem, applique, buttonhole, monogram, and make all the pretty embroidery designs by machine. Simply use the settings indicated in the illustration for the simple zigzag. Follow directions given in the following pages for more specific uses.

Fig. 1

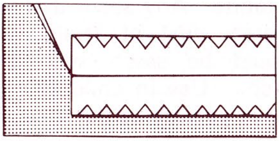
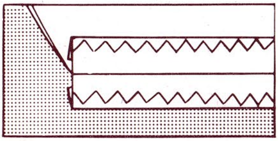


Fig. 2



OVERCASTING

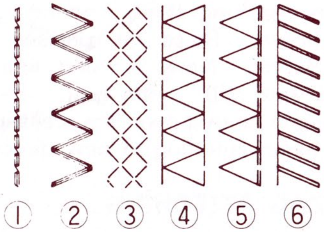
This is one of the more frequently used zigzag stitches in garment construction. You may want to overcast along the raw edge of each seam allowance or fold the raw edge toward the garment and stitch.

Fig. 1 shows the raw edge finished.
Fig. 2 illustrates the folded edge stitched.

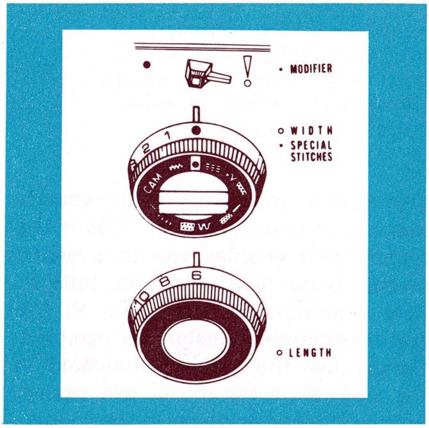
Stitch so the needle pierces the fabric just short of the outside edge. Raw or worn edges of older garments can be overcast to prevent further raveling.

STRETCH STITCHING

The stitches shown below are all for use with stretch and knit fabrics. These are special stitches built in to the machine for your quick selection.



1. Straight Stretch
2. Rick - Rack Stretch
3. Smocking Stretch
4. Elastic Stretch
5. Overcast Stretch
6. Serging or Pine Leaf Stretch

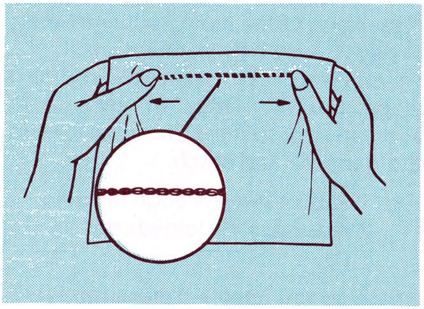


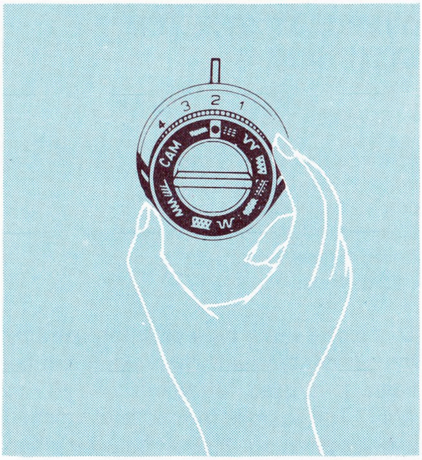
STRAIGHT STRETCH STITCHING

SETTINGS

Special Stitch Dial - ᴡᴡᴡ ▣ ≡≡
Stitch Width Control - Red Dot
Stitch Length Control - 6
Special Stitch Modifier - White Dot
Straight Stitch Foot
Straight Stitch Needle Plate

Use this stretch stitch with knitted fabric and other fabrics that stretch. Sew as you do with regular straight stitch seaming. The seam may be pressed open as with any regular seam, but will stretch if necessary. This is also a good stitch to use on curved seams regardless of the type of fabric. Any seam that will receive a great deal of strain when worn should be sewn with the stretch stitch. Use in children's shorts and slacks as well as adult sports clothes.



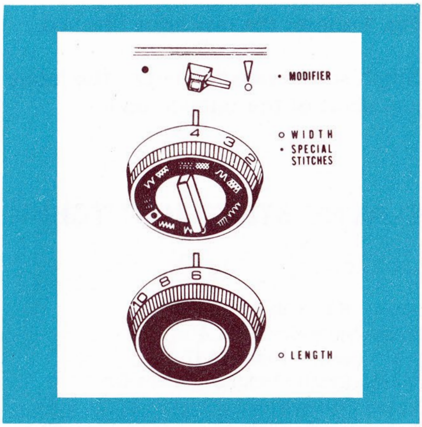


RICK-RACK STRETCH STITCHING

SETTINGS

Special Stitch Dial - WWW ◙ ≡≡≡
Stitch Width Control - 1 to 4
Stitch Length Control - 6
Special Stitch Modifier - White Dot
Zigzag Presser Foot
Zigzag Needle Plate

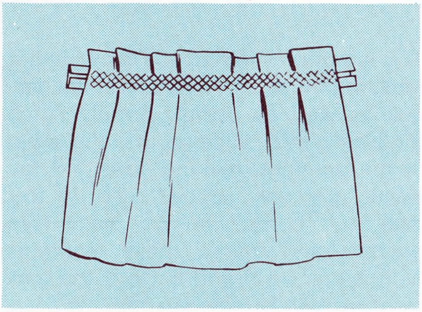
Sew on stretch fabrics in any area that you might use a zig zag stitch. This stitch can be used as a decorative top stitch as well.



SMOCKING STRETCH STITCHING

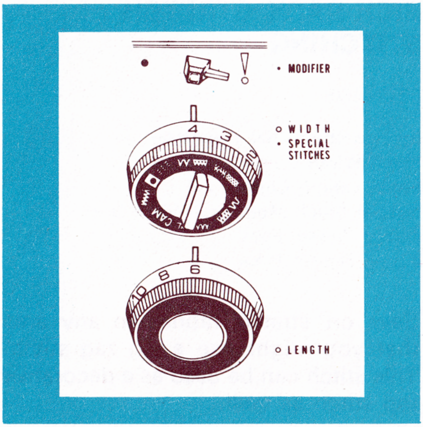
SETTINGS

Step 1. Make a straight line of gathers across the fabric that you wish to smock.
Step 2. Special Stitch Dial - WWW ◇◇◇
Stitch Width Control - 4
Stitch Length Control - 6
Special Stitch Modifier - White Dot
Zigzag Presser Foot
Zigzag Needle Plate



With a narrow strip of fabric directly under the line of gathering, stitch over the gathers. The design will be a series of small diamonds. Make the design more interesting by using two different colors of thread and the double needle.

When smocking a garment, the stitching should be done before the piece is sewn into the garment.



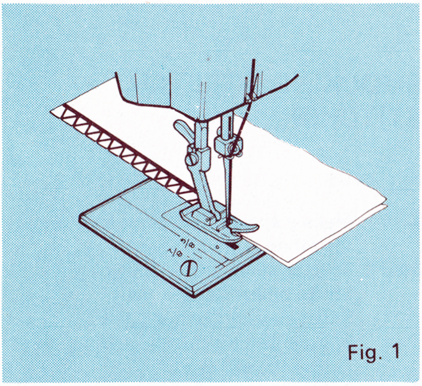
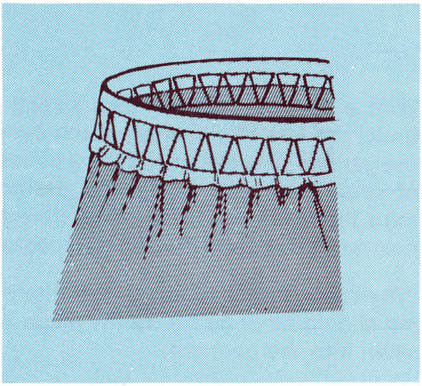


Fig. 1



OVERCAST STRETCH STITCHING

SETTINGS

Special Stitch Dial - VVWW
Stitch Width Control - 4
Stitch Length Control - 6
Special Stitch Modifier - White Dot
Zigzag Presser Foot
Zigzag Needle Plate

This is the same type of stitch used by the garment industry in making sportswear. It is used for seams of 3/8" to 1/4". The seam is formed and finished in one operation. It must be used when you are making swimwear, ski pants and other garments that require stretch.

Fig. 1 shows the raw edge finished.

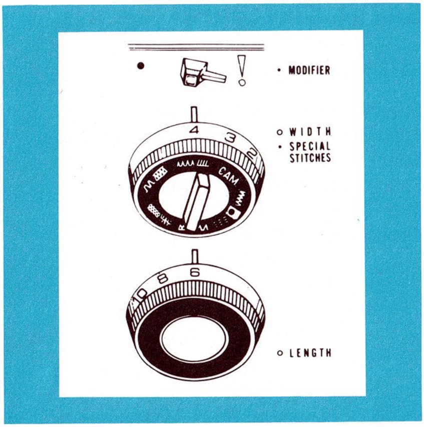
Stitch so the needle pierces the fabric just short of the outside edge.

ELASTIC STRETCH STITCHING

SETTINGS

Special Stitch Dial - ΛΛΛWW
Stitch Width Control - 4
Stitch Length Control - 6
Special Stitch Modifier - White Dot
Zigzag Presser Foot
Zigzag Needle Plate

This is a good stitch to use in making or repairing lingerie. The stitch is decorative as well as useful. Simply stitch the elastic into place around the waist of the garment, making sure that the elastic is evenly spaced. To do this mark the correct length piece into quarters and match these markings with center front and back of the garment as well as side seams.

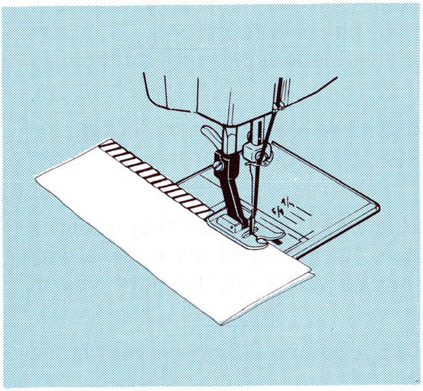


SERGING OR PINE LEAF STRETCH STITCHING

SETTINGS

Special Stitch Dial - ΛΛΛΛ////
Stitch Width Control - 4
Stitch Length Control - 6
Special Stitch Modifier - White Dot
Zigzag Presser Foot
Zigzag Needle Plate

The serging or pine leaf stretch stitch is equally useful with woven and knitted fabrics. This stitch can be used in making elastic swimwear, as well as overcasting a neat edge on the seams.



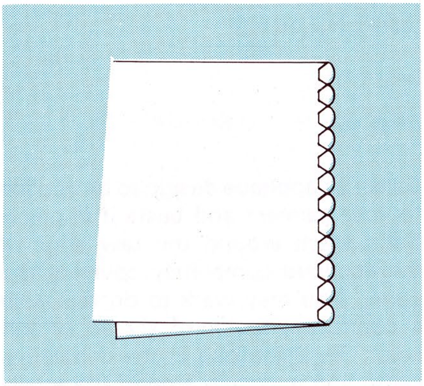
SHELL STITCHING

This stitch used on the edge of nylon tricot makes a lovely Shell finish. Use the following settings:

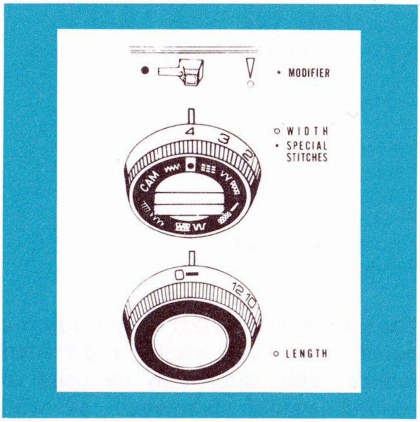
SETTINGS

Special Stitch Dial - ΛΛΛΛ////
Stitch Width Control - 4
Stitch Length Control - 10
Special Stitch Modifier - Red Dot
Zigzag Presser Foot
Zigzag Needle Plate

When sewing this stitch, allow needle to just clear the right edge of the fabric when it zig zags.



SPECIAL FINISHING STITCHES



SATIN STITCHING

SETTINGS

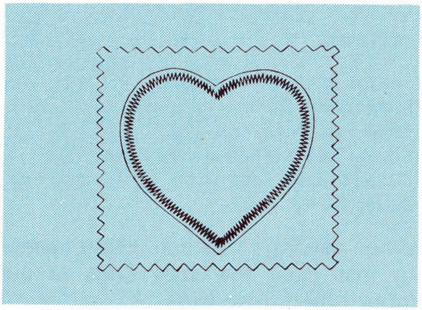
Special Stitch Dial - WWW●≡≡≡
Stitch Width Control - Any Number 1 to 4
Stitch Length Control - Red Zone
Special Stitch Modifier - Red Dot
Satin Stitch Foot
Zigzag Needle Plate

Closely spaced zigzag stitches are called satin stitches. This is an attractive stitch used for appliqueing, monogramming, buttonhole making. It is also the stitch that is used with the many decorative pattern cams for embroidery design work.

Whenever you are using this stitch, it is well to remember to loosen the tension of the top thread slightly. The wider the stitch you make, the looser the tension should be.

If you are stitching on a very soft fabric, it is well to use a backing of tissue paper or interfacing for a well formed stitch. Puckering of the material will be eliminated and the bobbin thread will not be visible on the right side of the fabric.

As with all special stitches, it is best to make a sample design on your fabric before starting the design on the garment.



APPLIQUEING

SETTINGS

Same as with Satin Stitching

Select an applique design to be applied to your garment and baste it in place. Satin stitch around the raw edge of the applique completely covering the edge. You may want to do this with a contrasting color of thread or self color. By using one of the decorative cams, you may sew around the applique giving it an interesting appearance.

BUTTONHOLE MAKING

SETTINGS

Special Stitch Dial - www⊡≡≡≡
Stitch Width Control - 1 to 1½
Stitch Length Control - 0
Special Stitch Modifier - Red Dot
Feed Dogs - Down
Buttonhole Foot
Zigzag Needle Plate

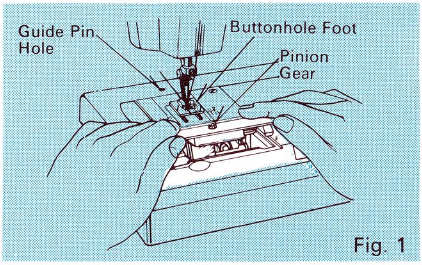


Fig. 1

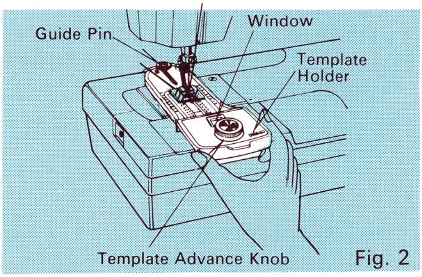


Fig. 2

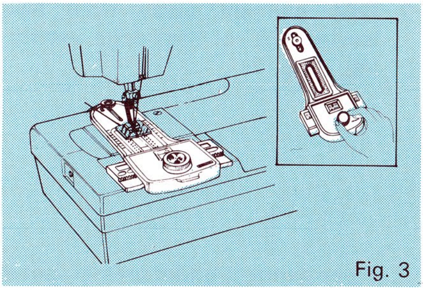


Fig. 3

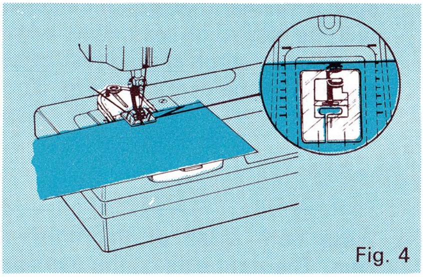


Fig. 4

1. Turn hand wheel so needle is down. Remove base front cover by pushing release button. Open shuttle cover. Insert buttonhole adapter minus cover plate with pinion gear. Insert cover plate at 45 degree angle. Snap into place.
2. Screw guide pin into the guide pin hole on the machine bed directly behind the needle plate.
3. Insert a template into the slot of template holder by lifting the bottom portion of the Template Holder. Select the proper size buttonhole by turning the Template Advance Knob.

   Pull guide plate all the way forward so that guide pin is at S. This will enable you to start at one end of the buttonhole. Drop guide plate into place over gear on cover plate.
4. Pick up bobbin thread through guide plate by turning hand wheel and drawing thread to back of machine. Place fabric between presser foot and guide plate. Line up edge of fabric with marked indentation on guide. See Fig. 4. If you wish all buttonholes to be 3/4 inch from edge of garment, line up fabric with 3/4 inch marking each time you start sewing a buttonhole.

Always make a practice buttonhole on a scrap of fabric you plan to use. Try the buttonhole with the button you will use.

Always use an interfacing in area of garment where buttonholes are placed. Tissue paper or regular interfacing can be used. Tear paper away after stitching, if it is used.

For heavier weight fabrics, loosen your top tension slightly and use a wider stitch width setting.

BLIND HEMMING

SETTINGS

Special Stitch Dial - VV WW
Stitch Width Control - 2 to 3
Stitch Length Control - 12 to 8
Special Stitch Modifier - Red Dot
Zigzag foot or edgestitcher if available
Zigzag Needle Plate

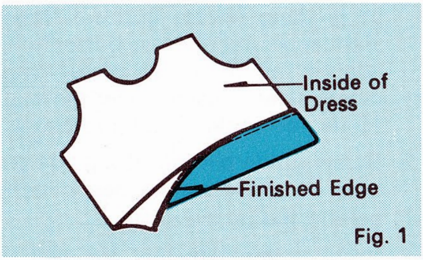

Inside of Dress
Finished Edge

Fig. 1

1. Finish edge of hem anyway you desire. Turn up hem appropriate width. (Fig. 1)

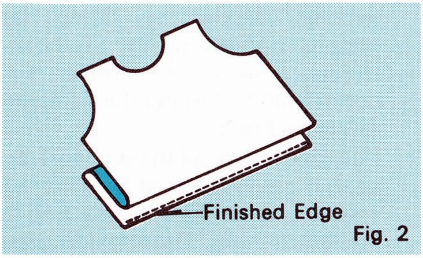

Finished Edge

Fig. 2

2. Fold garment away from hem leaving 1/8" of hem edge extending. (Fig. 2)

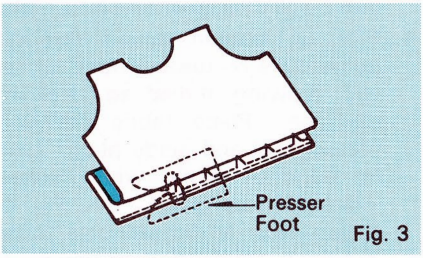

Presser Foot

Fig. 3

3. Place garment under presser foot in such a manner that straight stitches will be sewn on extended edge. The zigzag stitch should just catch the fold of the garment. (Fig. 3)

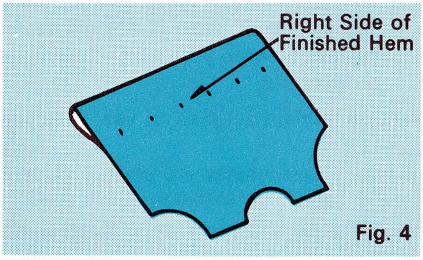

Right Side of Finished Hem

Fig. 4

4. Press both sides of the finished hem. The right side of the garment will show only the blind stitches. (Fig. 4)

ZIPPER APPLICATION

SETTINGS

Special Stitch Dial - ᴡᴡᴍ⊙☰☰☰
Stitch Width Control - Red Dot
Stitch Length Control - 12 to 10
Special Stitch Modifier - Red Dot
Zipper Foot
Straight Stitch Needle plate

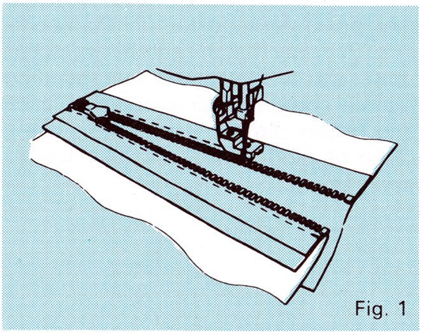


Fig. 1

REGULAR ZIPPER

The foot is adjustable for use on the right or left side of the needle when sewing the regular type of zipper. Adjust the foot so the needle clears the side notch on the foot. See Fig. 1. Carefully follow directions given on the zipper package.

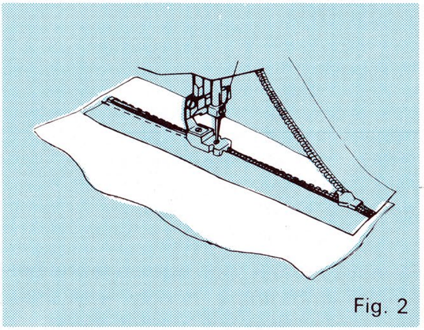


Fig. 2

INVISIBLE ZIPPER

Adjust the foot so the needle is sewing through the center hole of the foot and one groove of the foot is riding on the teeth of the zipper.
See Fig. 2. Follow the zipper manufacturer's instructions.

After zipper has been inserted, finish sewing seam by shifting foot to side position sewing through side notch.

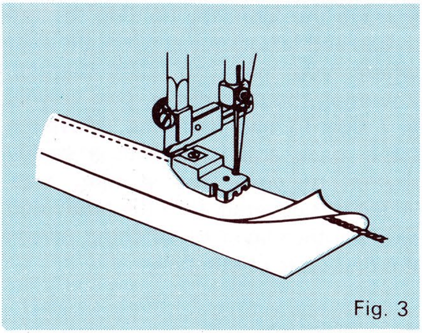
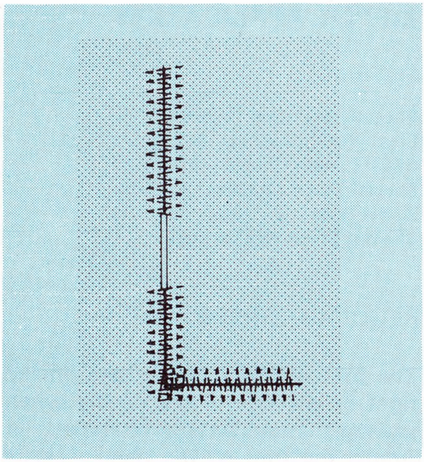


Fig. 3

CORDING

Foot can also be used to make cording for slipcovers etc. Cover a cord with a strip of bias fabric and sew as shown in Fig. 3.

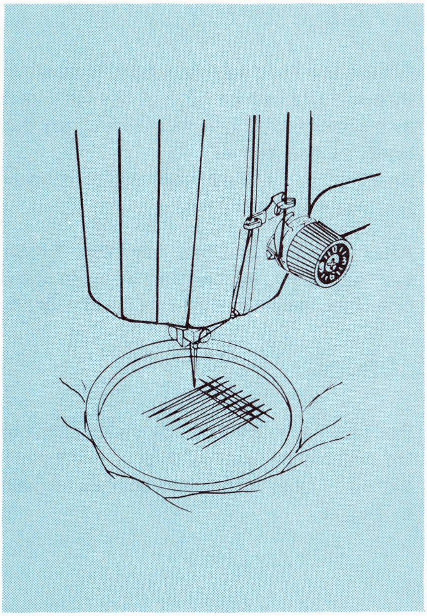


MENDING

SETTINGS

Special Stitch Dial - WWW XXXX
Stitch Width Control - 4
Stitch Length Control - Red Zone
Special Stitch Modifier - Red Dot
Zigzag Presser Foot
Zigzag Needle Plate

To repair a straight or three-cornered tear, position the tear under the needle in such a way that the stitching catches both sides of the tear. When mending a three-cornered tear, stitch from each end to the center. It is well to use a piece of fabric under the tear for reinforcement.

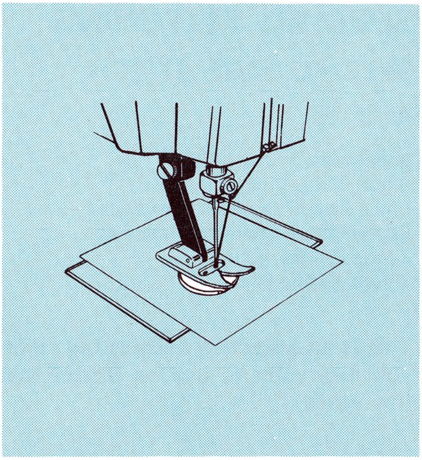


DARNING

SETTINGS

Special Stitch Dial - WWW ▣ ≡≡≡
Stitch Width Control - Red Dot
Special Stitch Modifier - Red Dot
Feed Dogs- Down
No Presser Foot

Remove presser foot, stretch fabric between embroidery hoops with hole centered. Draw the bobbin thread up through the fabric by holding the top thread and taking one stitch at the spot where you wish to start darning. Lowering the presser bar, start sewing at a slow to medium speed. Move the fabric back and forth with a steady rhythm to cover the darning area. When it is covered, turn the fabric and sew another layer of stitching across the first layer of stitching.

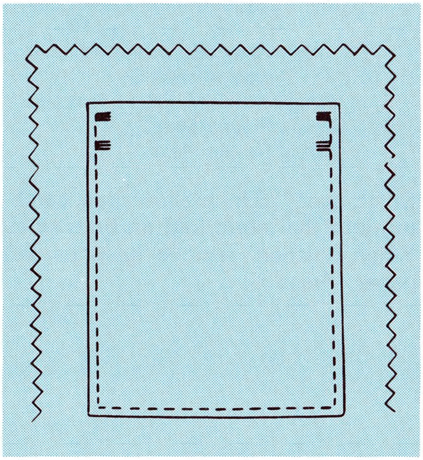


BUTTON SEWING

SETTINGS

Special Stitch Dial - WWW⊙≡≡≡
Feed Dogs - Down
Special Stitch Modifier - Red Dot
Zigzag Presser Foot
Zigzag Needle Plate

1. Align two holes of button with slot of presser foot and lower foot to hold the button securely.
2. Turn hand wheel manually until needle point is just above button.
3. Adjust stitch width control so needle will enter left hole of the button.
4. Turn hand wheel again by hand so needle enters second hole. Re-adjust stitch width if necessary. Stitch a number of times.
5. Finish sewing with an extra two inches of thread remaining. Draw these threads to reverse side of garment and tie.



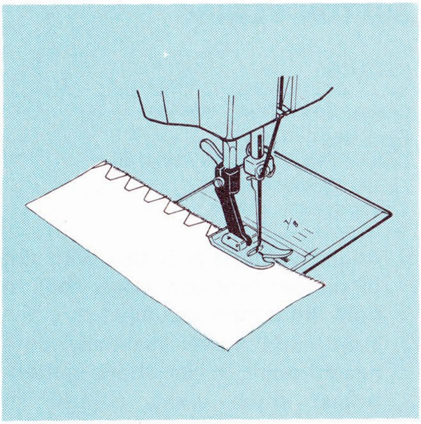
BAR TACKING

SETTINGS

Special Stitch Dial - WWW⊙≡≡≡
Stitch Width Control - 2 to 4
Stitch Length Control - Red Zone
Special Stitch Modifier - Red Dot
Zigzag Presser Foot
Zigzag Needle Plate

This stitch is similar to a very short satin stitch and is used to reinforce points of strain such as corners of pockets and straps on lingerie.

Sew 4 to 6 zigzag stitches.



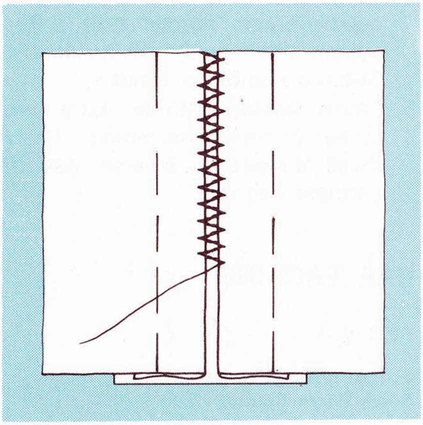
SPECIAL STITCHING

SPECIAL EDGE STITCH

SETTINGS

Special Stitch Dial - VV WW
Stitch Width Control - 1 to 4
Stitch Length Control - Red Zone
Special Stitch Modifier - Red Dot
Zigzag Presser Foot
Zigzag Needle Plate

This is an attractive overcasting stitch you may want to use on fabrics that fray easily.



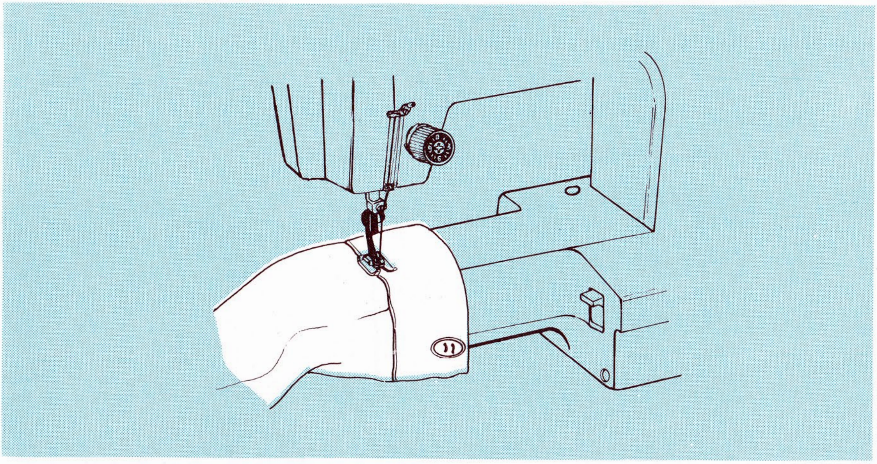
FAGOTING STITCH

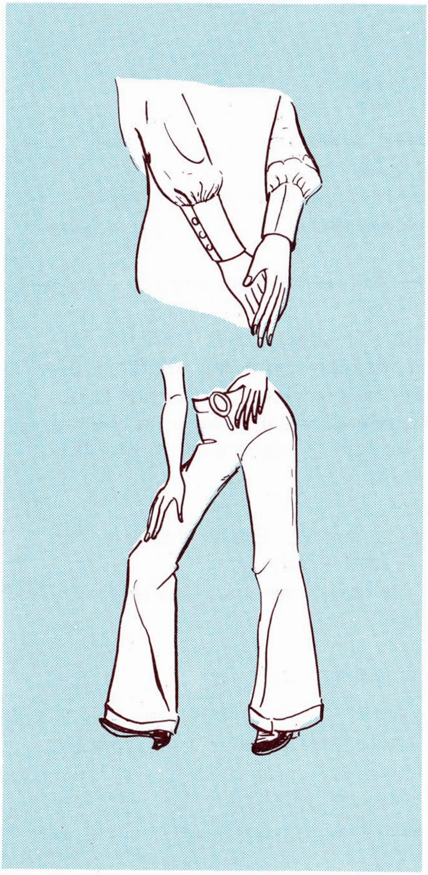
Step 1. Fold under the seam allowance on the cut edges and press. Baste the folded edges to paper, allowing 1/8 inch between the edges.

Step 2. Settings
Use design cam #50.
Special Stitch Dial - CAM
Stitch Width Control - 4
Stitch Length Control - Red Zone to 12
(May vary depending upon type of material)
Special Stitch Modifier - Red Dot
Zigzag Presser Foot
Zigzag Needle Plate

Stitch over 1/8 inch allowance, catching into the fabric fold on both sides. When finished, remove bastings and paper. Press.

FREE-ARM SEWING





This sewing machine can be used like a flat bed machine, but easily converts to free arm machine by removing the base.

The free arm enables you to sew tubular types of pieces more easily. Just slip the sleeve or pants leg on the free arm as shown above.

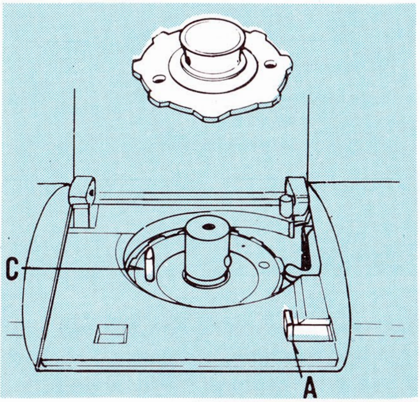
You will find many uses for this free arm feature such as:

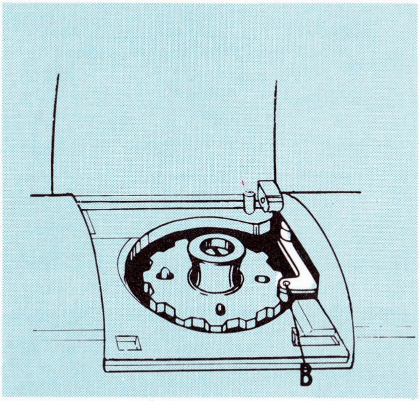
1. Mend elbows and knees of garments more easily.
2. Sew in sleeves more easily. This is especially true when sewing smaller garments.
3. Applique, embroider or hem around edges of cuffs or pants legs.
4. Sewing in elastic casings in skirts or pants at the waistline.

SPECIAL DESIGN STITCHING

This model sewing machine enables you to sew a variety of decorative embroidery stitches just by the insertion of the different cams supplied with your machine.

First you will want to know how to insert the cams:





1. Turn handwheel so needle is at its highest position.
2. Set stitch width at red dot. Open cam cover.
3. Remove metal cam from the machine by pushing lever A to the right.
4. Grasp plastic design cam and slip cam onto the shaft as you push lever A to the right.

   Make sure the indicator pin C enters the hole in the cam and the cam is seated as far down as it will go.

   To start a pattern at its beginning, align the engraved dot on the cam with the follower B. To do this slip the cam onto the shaft so the engraved dot is as near the cam follower as possible. If the dot is not aligned with the follower, turn the hand wheel toward you until the dot is aligned. (If the machine is threaded, be sure to place a scrap of fabric under the presser foot).
5. Set machine as indicated on next page.
6. To remove the pattern cam, follow steps 1 and 2. Grasp the cam and pull from the shaft while holding lever A to the right.
7. Be sure to replace the plastic cam with the metal cam that was originally in the machine.

THINGS TO REMEMBER WHEN DESIGN STITCHING

1. Always make a practice design on a scrap of the fabric you plan to use.
2. Start with a full bobbin and plenty of thread on the spool to avoid running out of thread in the middle of your design.
3. Reduce the top thread tension slightly.
4. On a very soft fabric you may want to use a tissue paper backing or organdy that can be cut away.

SINGLE NEEDLE DESIGNS

SETTINGS

Special Stitch Dial - CAM
Stitch Width Control - 1 to 4
Stitch Length Control - Red Zone
Special Stitch Modifier - Red Dot
Satin Stitch Foot
Zigzag Needle Plate

All the designs can be varied by adjusting stitch width or stitch length or by using a double needle. See the illustrations for interesting and attractive uses of the designs. You will soon be combining designs and creating new uses when you become familiar with your machine.

Fig. 1 Design on a collar

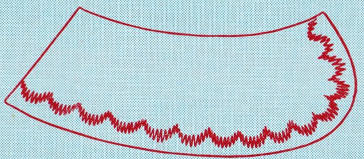


Fig. 2 Design on bias tape

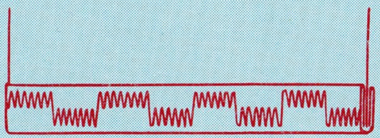


Fig. 3 Variation of widths of designs

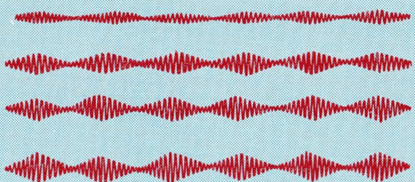


Fig. 4 Combination of designs

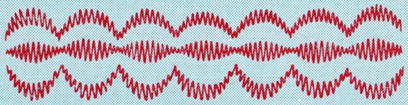
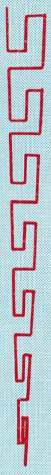


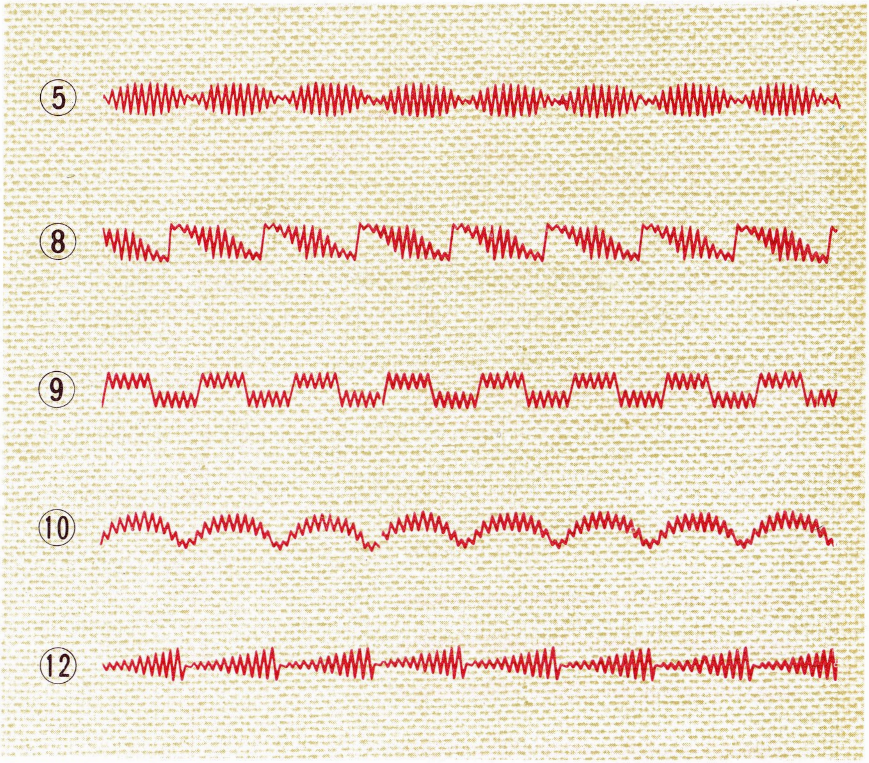
Fig. 5
Variation of width of reverse stitch design



BASIC DECORATIVE DESIGNS

SETTINGS

Special Stitch Dial - CAM
Stitch Width Control - 1 to 4
Stitch Length Control - Red Zone
Special Stitch Modifier - Red Dot
Satin Stitch Foot
Zigzag Needle Plate



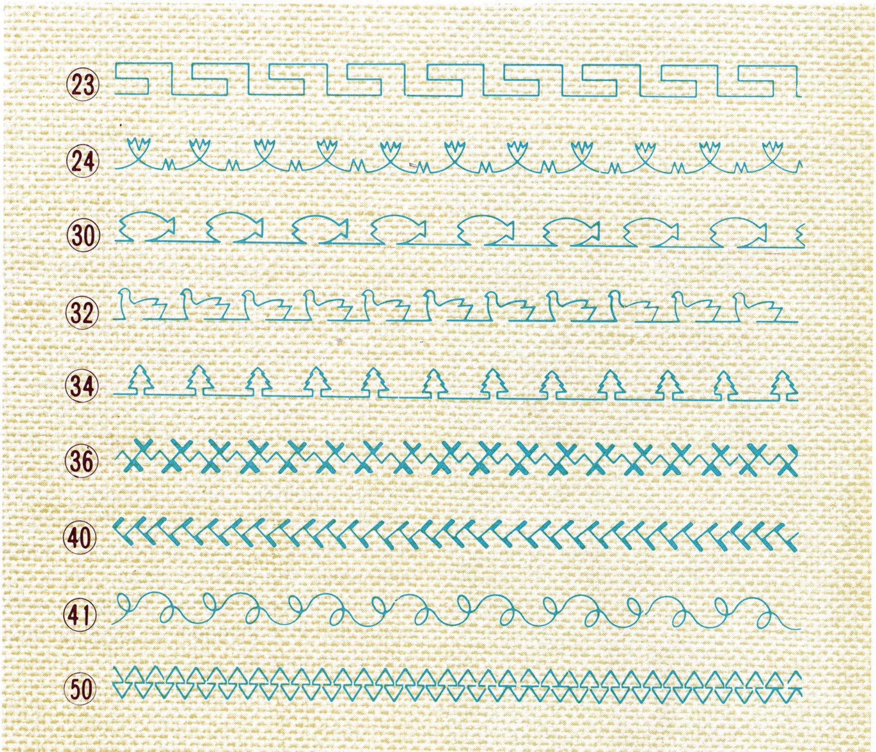
REVERSE STITCH DESIGNS

SETTINGS

Special Stitch Dial - CAM
Stitch Width Control - 1 to 4
Stitch Length Control - 6
Special Stitch Modifier - ▼ Arrow Head Mark
Satin Stitch Foot
Zigzag Needle Plate

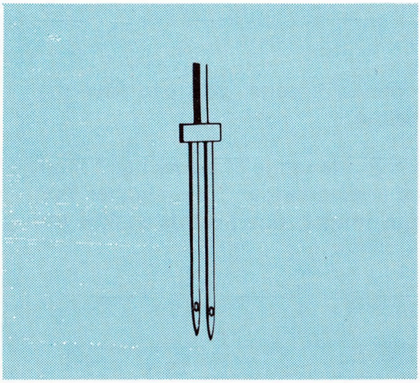
In addition to the basic designs on the previous page, you can sew the interesting reverse stitch designs shown below.

Adjust Special Stitch Modifier slightly within the range of arrow head mark if necessary so stitches match the designs shown below. Remember that turning Modifier upwards makes the design longer, downwards makes the design shorter.



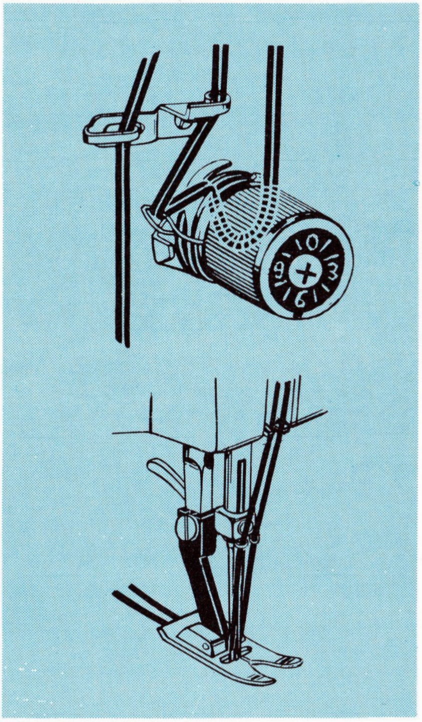
USING THE DOUBLE NEEDLE

All patterns can be made with the double needle with very striking effects. The machine is set exactly the same as when using the single needle with one important exception. The Stitch Width Control must never be set beyond 3. The double needle will be broken if a wider stitch is used.



PLACEMENT OF NEEDLE

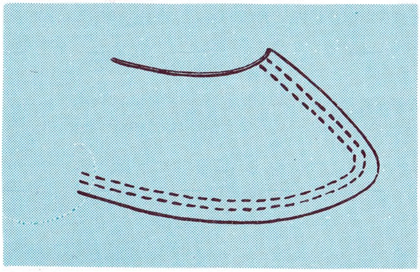
Raise the needle bar to its highest position and loosen the needle screw. Hold the double needle with the flat side away from you. Slip the needle into the needle bar as far as it will go. Tighten the screw.



THREADING THE DOUBLE NEEDLE

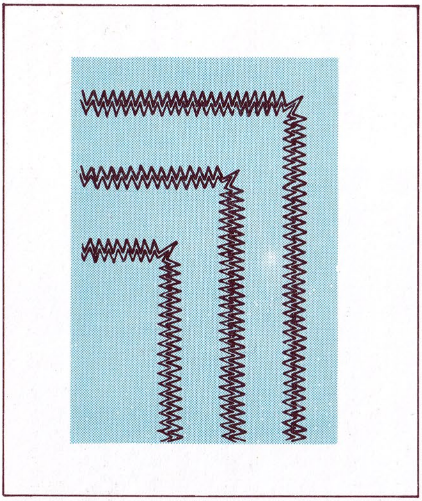
Place a spool of thread on each spool pin. Draw both threads through the upper thread guides. Pass both threads between tension discs of the thread tension assembly. Continue threading as you do for single needle sewing except where double thread guides are provided. Draw one thread through each side of the double thread guides and through each needle from front to back. Turn hand wheel manually once to be sure needle will clear the presser foot. Pick up bobbin thread as for single needle sewing. Pull threads to back of foot and start to sew.

DOUBLE NEEDLE STITCHING



You may find that you would like to use the double needle for straight stitching as well as for designs. Make decorative top stitching around the collars and other edges with your machine set for straight stitching. Whenever you use the double needle even for straight stitching, be sure to use a zigzag presser foot.

TURNING A CORNER WITH DOUBLE NEEDLE



To turn a square corner with a double needle, stop stitching with the longer needle tip just piercing the fabric. Raise the presser foot, shift fabric half the turn, lower presser foot and take one stitch.

Raise the presser foot again, complete the turn, and begin stitching in the new direction.

Checking Performance Problems WHAT TO DO

PROBLEM	PROBABLE CAUSE	CORRECTION
Irregular Stitches	Incorrect size needle.	Choose correct size needle for thread and fabric.
	Improper threading.	Rethread machine.
	Loose upper thread tension.	Tighten upper thread tension.
	Pulling fabric.	Do not pull fabric; guide it gently.
	Light pressure on presser foot.	Increase pressure on presser foot.
	Loose presser foot.	Reset presser foot.
	Unevenly wound bobbin.	Rewind bobbin.
	Nicks or burrs on shuttle.	Replace shuttle, or polish off burrs completely.
	Nicks or burrs at hole of needle plate.	Replace needle plate, or polish off burrs completely.
Breaking Needle	Pulling fabric.	Do not pull fabric; guide it gently.
	Incorrect size needle.	Choose correct size needle for thread and fabric.
	Incorrect setting of needle.	Reset needle.
	Loose presser foot.	Reset presser foot.
Bunching of Thread	Upper and lower threads not drawn back under presser foot before starting seam.	When starting a seam be sure to draw both threads under and back of presser foot about 4" and hold until a few stitches are formed.
Puckering	Incorrect thread tension(s).	Reset thread tension(s).
	Light pressure on presser foot.	Increase pressure on presser foot.
	Using two different sizes or kinds of thread.	Upper thread and bobbin thread should be same size and kind.
	Bent or blunt needle.	Insert new needle.
	Loose presser foot.	Reset presser foot.
	Fabric too sheer or too soft.	Use underlay of tissue paper.

PROBLEM	PROBABLE CAUSE	CORRECTION
Skipping Stitches	Incorrect size needle. Certain knits and synthetics. Bent or blunt needle. Incorrect setting of needle. Tight upper thread tension. Light pressure on presser foot.	Choose correct size needle for thread and fabric. Use "Q NEEDLE"™. Insert new needle. Reset needle. Loosen upper thread tension. Increase pressure on presser foot.
Breaking Upper Thread	Starting to stitch too fast. Improper threading. Tight upper thread tension. Incorrect size needle. Sharp eye in needle. Nicks or burrs on shuttle. Nicks or burrs at hole of needle plate.	Start to stitch at a medium speed. Rethread machine. Loosen upper thread tension. Choose correct size needle for thread and fabric. Insert new needle. Replace shuttle, or polish off burrs completely. Replace needle plate, or polish off burrs completely.
Breaking Bobbin Thread	Improper bobbin case threading. Tight bobbin thread tension. Lint in bobbin case or shuttle.	Check bobbin case threading. Loosen bobbin thread tension. Clean bobbin case and shuttle.
Fabric not Moving	Feed dog down. Light pressure on presser foot. Thread knotted under fabric.	Raise feed dog. Increase pressure on presser foot. Place both threads back under presser foot before beginning to stitch.
Machine Jamming Knocking Noise	Thread caught in shuttle.	Disassemble and clean shuttle.
Machine does not sew.	Hand wheel not returned to stitching position.	Push in clutch.

Caring for the Machine

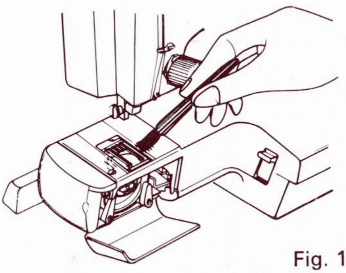


Fig. 1

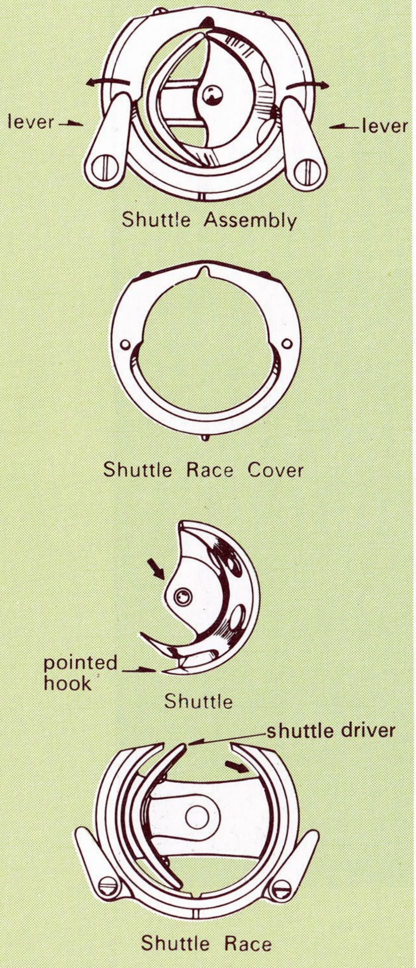


Fig. 2

CLEANING AND OILING

Fig. 1 Cleaning the feed dogs with a brush.

To insure the best possible operation of your machine, it is necessary to keep the essential parts clean at all times. Using a small brush, remove the lint that accumulates in the shuttle area and around the feed dogs.

Fig. 2 Parts of the Shuttle Assembly

To Clean the Shuttle Area:

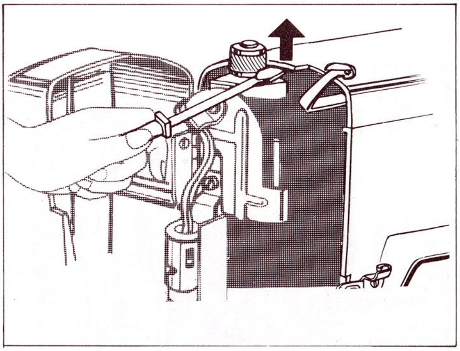
1. This area must be kept free of dust, lint and occasional tangled thread. Raise the needle bar to its highest point and remove the bobbin case.
2. Push levers of shuttle race aside and lift shuttle race cover and shuttle out.
3. Clean the shuttle race with small brush.
4. Put a drop of oil on the center pin of the shuttle and shuttle race. (see arrows)

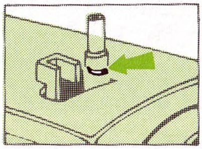
To Replace Shuttle Assembly:

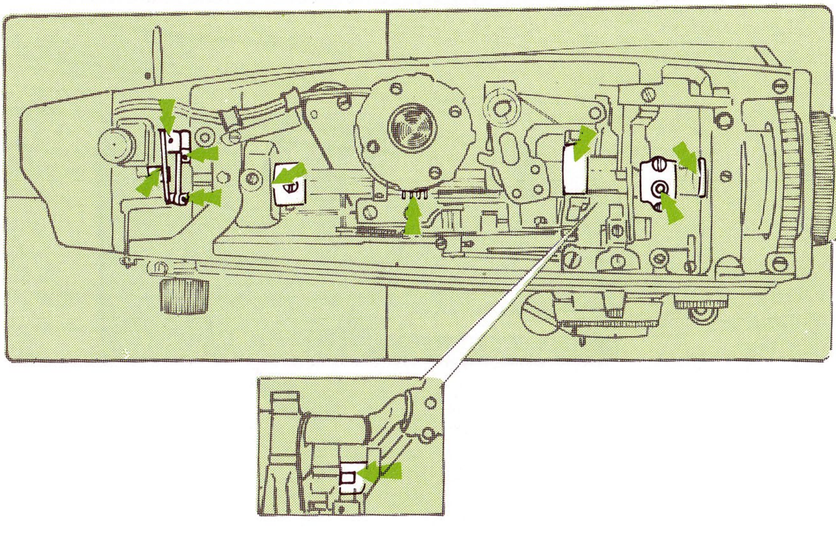
1. Position shuttle race as illustrated so that race is forming half moon on the left side of the machine.
2. Hold shuttle by center pin and position shuttle so as to form a half moon on the right side. Pointed hook will be on the bottom.
3. Place shuttle race cover into place over shuttle assembly.
4. Snap the levers into position.

OILING UNDER ARM COVER PLATE

Remove arm cover plate to oil points indicated in top of machine head. To remove cover plate, insert a screw driver into the spacing between arm casting and top cover plate and lift the cover plate as illustrated below.

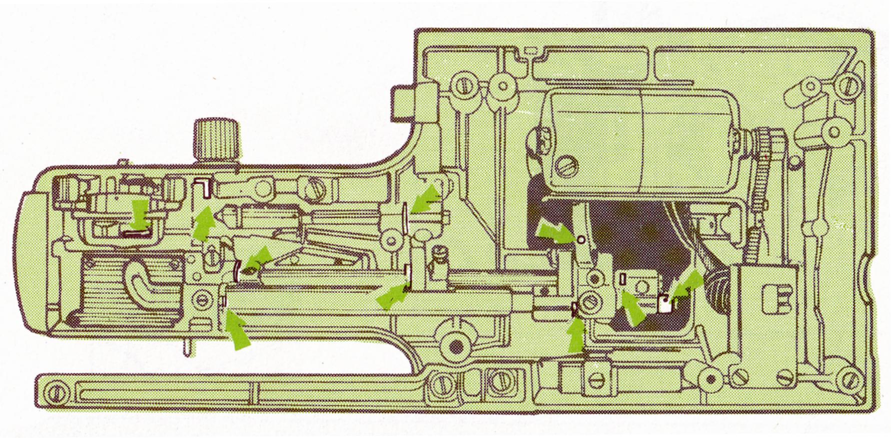


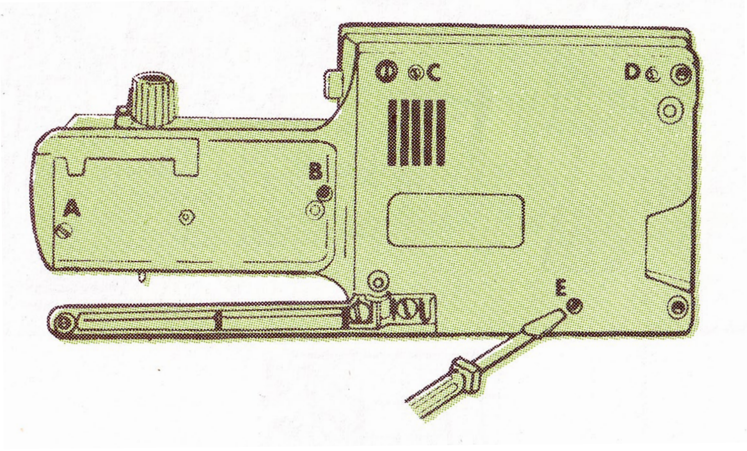




OILING UNDERSIDE

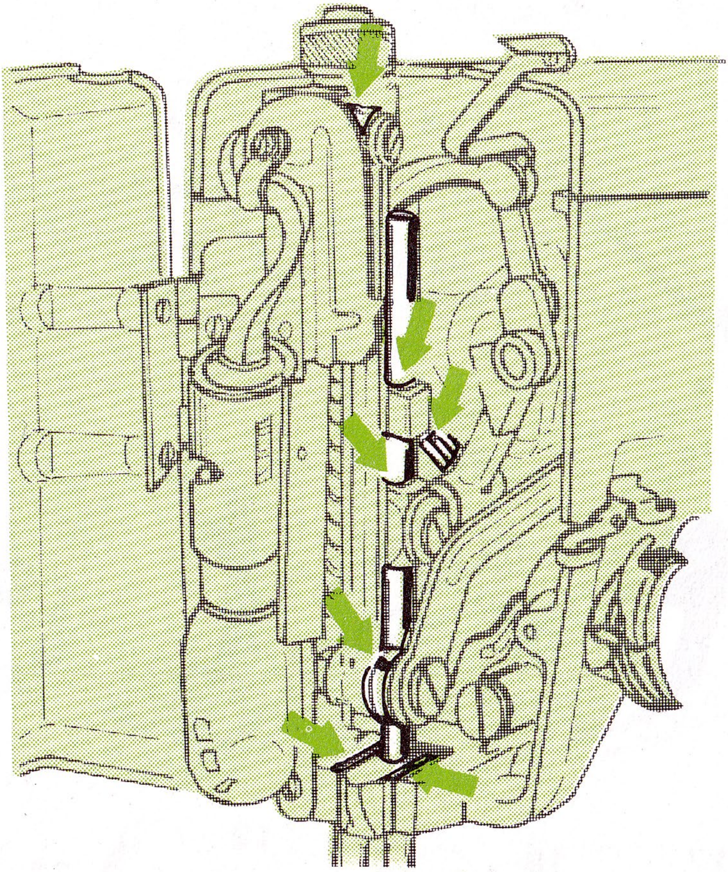
Tilt machine head back and remove bottom cover to oil points indicated on underside of machine. To remove bottom cover, remove screws (A), (B), (C), (D) and (E) as shown below.



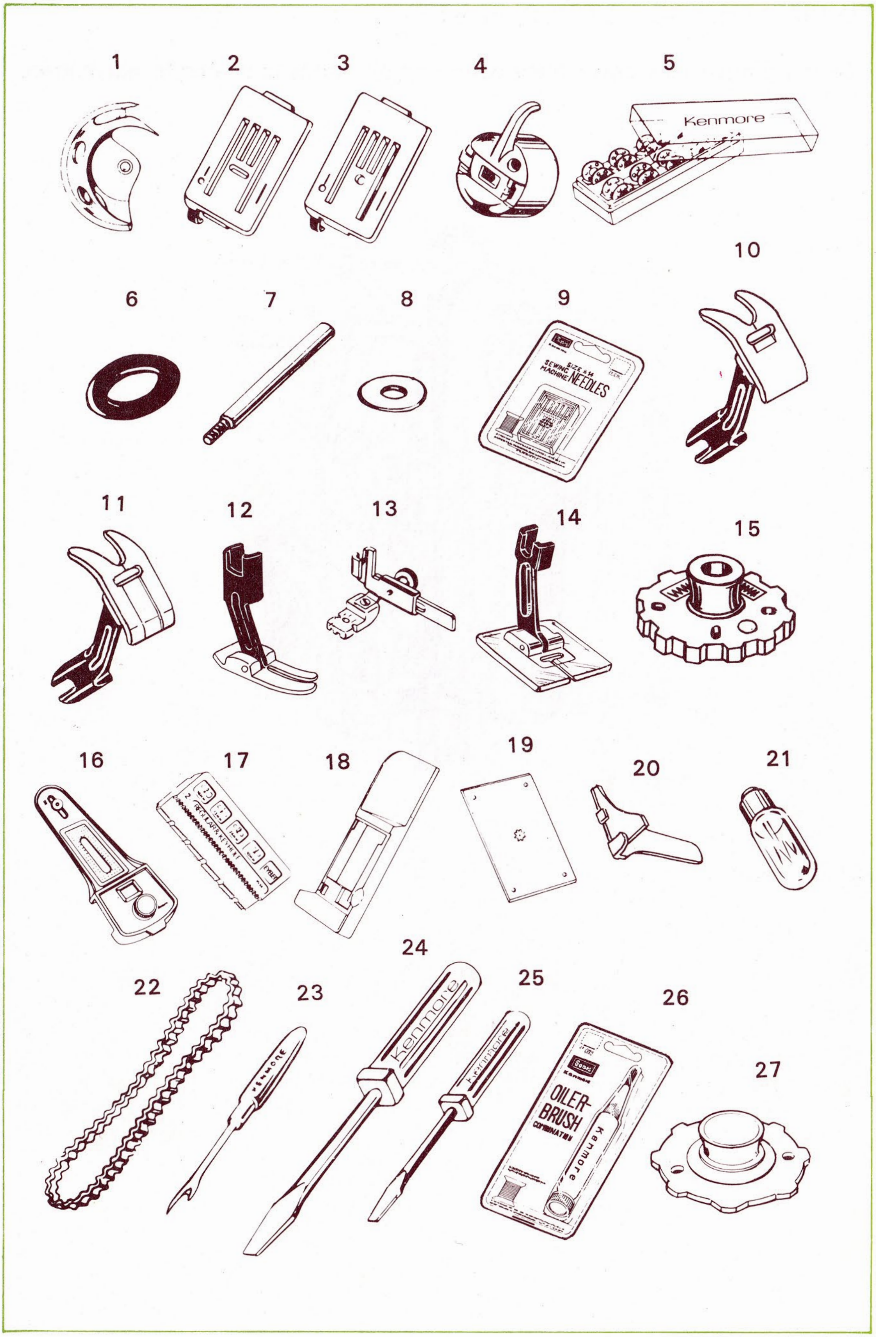


OILING IN FACE COVER PLATE

Swing hinged face cover plate open and oil points indicated in illustration.



PARTS LIST


Kenmore
SIZE #14
SEWING MACHINE NEEDLES
KENMORE
Kenmore
Kenmore
Sears
OILER-BRUSH
COMBINATION
Kenmore

PARTS LIST

All parts listed herein may be ordered from any Sears, Roebuck and Co. or Simpsons-Sears Limited store or service center.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

1. PART NUMBER
2. PART DESCRIPTION
3. MODEL NUMBER
4. NAME OF ITEM

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for expedited handling.

REF. #	PART #	DESCRIPTIONS
1	47	Shuttle
2	38295	Needle plate insert... Zigzag stitch
3	38296	Needle plate insert... Straight stitch
4	6510	Bobbin case
5	*6862	Bobbin box with 10 bobbins
6	1939	Bobbin winder rubber ring
7	8286	Thread spool pin
8	2273	Nylon disc
9	*6740	# 9 Single needles
	*6741	#11 Single needles
	*6742	#14 Single needles
	*6743	#16 Single needles
	*6744	#18 Single needles
	*6745	Double needles
	*6746	"Q NEEDLES"™
10	42063	Standard zigzag foot
11	42064	Satin stitch foot
12	42062	Straight stitch foot
13	6759	Zipper foot
14	41040	Buttonhole foot
15	26845	Pattern cam #5
	26848	Pattern cam #8
	26849	Pattern cam #9
	26850	Pattern cam #10
	26852	Pattern cam #12
	26863	Pattern cam #23
	26864	Pattern cam #24
	28772	Pattern cam #30
	28771	Pattern cam #32
	28763	Pattern cam #34
	28766	Pattern cam #36
	28767	Pattern cam #40
	28765	Pattern cam #41
	40425	Pattern cam #50
16	41162	Buttonhole guide plate
17	35346	Buttonhole template (#1)
	35347	Buttonhole template (#2)
18	48274	Buttonhole adapter
19	40530	Buttonhole cover plate
20	6864	Needle threader
21	6797	Light bulb
22	41152	Motor belt
	41014	Motor belt
23	6830	Buttonhole opener
24	41670	Large screw driver
25	41669	Small screw driver
26	*6889	Oil and lint brush
27	26860	Metal cam

*These items are not furnished with the machine, but may be ordered per instructions above.

M E M O

WARRANTY

FULL 25-YEAR WARRANTY ON SEWING MACHINE HEAD

For 25 years from the first day of use in your home, Sears will, free of charge, repair defects in material or workmanship which appear in the sewing machine head.

FULL TWO YEAR WARRANTY ON ELECTRICAL EQUIPMENT OF SEWING MACHINE

For two years from the first day of use in your home, Sears will, free of charge, repair defects in material or workmanship which appear in the electrical equipment of the sewing machine, including motor, wiring, switch and speed control.

FULL 90-DAY WARRANTY ON ALL PARTS AND MECHANICAL ADJUSTMENTS

For 90 days from the first day of use in your home, Sears will, free of charge, replace any parts and provide mechanical service necessary for proper operation of the sewing machine, except for normal maintenance.

To obtain warranty service described above, simply contact the nearest Sears store or Service Center throughout the United States or Canada.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Simpsons-Sears Limited
Toronto, Ontario, Canada

Sears, Roebuck and Co.
BSC 41-3
Sears Tower
Chicago, IL 60684

SEWING MACHINE

Now that you have purchased your Sewing Machine, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. or Simpsons-Sears Limited Stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Sewing Machine will be shown on your nomenclature plate on the right side of your Sewing Machine. See Section 1, page 3 for location.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

*MODEL NUMBER *NAME OF ITEM *PART DESCRIPTION

If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A. and
SIMPSONS-SEARS LIMITED, Toronto, Ontario, Canada

S - 158 Printed in Japan Part No. 44416 ⑱